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Restoring Infantry Overmatch Starts in 2020

As we drafted this newest edition of INFANTRY, we entered a brand new decade rife with opportunities and challenges. Early on, the “twenties” (2020’s) already portend significant changes in the strategic, operational, and tactical landscapes where our Infantry will operate. For example, the 29th of February 2020 hailed the signing of a peace deal with the Taliban that, after 18 years, could mark the end of America’s longest war. In his remarks in Kabul on the occasion of the peace deal, Secretary of Defense Mark Esper honored all service members who fought through the years for this hard earned settlement. I would like to similarly pay tribute to the role of our Infantry throughout this campaign. It is precisely because of our unyielding relentless pressure, and the Taliban’s unsustainable losses in spite of their operational sanctuary, that inspired them to come to the negotiating table.

Entering a new decade also generally gives cause for reflection. I remind young Infantry officers that most of today’s Battalion Commanders know only an Army engaged in conflicts in places like Iraq and Afghanistan. While this combat experience is invaluable, it is also incomplete. Considering the wide range of tactical and operational challenges associated with potential large-scale combat operations against peer adversaries, and considering the context of how all domains (land, air, sea, space, and cyber) influence these efforts, ensuring today’s Infantry leaders are prepared to achieve victory in large-scale combat operations is paramount. This requires emphasis on skills extending beyond small unit action in support of counterinsurgency, and also requires renewed focus necessary to deliver core and functional expertise expected of our branch.

Achieving the tenets of “Army Vision 2028” requires balancing reform, readiness, and modernization initiatives. Today’s acceleration of, and necessary changes within, each of these areas is unprecedented. Moreover, this acceleration induces friction and perhaps constitutes one of the most dynamic periods of change our Army has ever witnessed. Considering almost two decades at war, combined with numerous continued operational commitments around the globe, requires careful evaluation of the state of Infantry proficiency in both our School and in our formations. The Army Modernization Strategy, and the associated overhaul of capabilities, also necessitates an inward look on the culture of our Infantry that resides in every echelon.

Beginning in Fiscal Year 2020 (October 2019), the U.S. Army Infantry School (USAIS) embarked on a path to reinvigorate support to both TRADOC and FORSCOM in providing quality instruction representative of an unrivaled Army, while delivering proficient Soldiers to units with confidence gained from their hard earned and rewarding experience here. Concurrently, USAIS supports Army formations with integration of urgent force modernization efforts; supports Army talent alignment processes internal to the School and as the branch proponent; facilitates Army wide implementation of the new individual weapons integrated training strategy and qualification; implements a sustainable lieutenant initial military training (IMT) strategy; aligns NCO PME with new and emerging doctrine; clarifies proponent roles for functional training; evaluates course physical fitness entry standards following the Army’s implementation of the Army Combat Fitness Test (ACFT); fully implements expanded One Station Unit Training (OSUT); and informs audiences of initiatives within the School and the branch. Lastly, in the years ahead, your Infantry School will identify, prioritize, and restore functional training shortfalls, while simultaneously maximizing existing resources.

While senior leaders in Infantry formations know well an Army engaged in conflict, few, if any, of our most senior leaders are familiar with an Army comprehensively engaged in modernization. Where the “Big Five” (M1 tank, M2 fighting vehicle, AH-64 attack helicopter, UH-60 helicopter, and Patriot air defense missile system) first emerged in the early 1970s, they will remain in our inventory for over a half a century. Entering the 20’s, Army Futures Command seeks to introduce 31 Signature efforts across the Army’s new modernization priorities (long range precision fires; future vertical lift; next generation combat vehicle; air and missile defense; soldier lethality; network; assured positioning, navigation, and timing; and the synthetic training environment). Given our Army fielded the “Big Five” over a period of two decades and in the context of the Cold War, in considering the Army’s overhaul ahead, I often pose the question, “what does a modernizing Army look like?” It’s highly unlikely the pace of commitments will lessen considering the current strategic security environment. Today’s Infantry leaders will likely continue to accrue combat experience and ensure formations remain trained and ready. They will also accomplish this while simultaneously fielding and integrating new equipment rapidly.

This new decade indeed presents exciting opportunities for our Infantry and our Army. This decade will come to define the period where our Army regains overmatch against all potential adversaries. The U.S. Army Infantry School will continue to produce fit, motivated, and disciplined Infantry who will close with and destroy the enemies of our nation. Investing in our people first, we will balance readiness, reform, and modernization in the dynamic decade ahead.

I am the Infantry! Follow me!
Historically, it has taken three to five years for the Army to acquire the approvals necessary to pursue new technology or weaponry. The modernization initiative that gave us the U.S. Army Futures Command (AFC) and upended traditional methodologies in favor of need, speed, and efficiency has reduced that time to three to five months. Years to months.

The AFC’s Soldier Lethality Cross Functional Team (SL CFT) at Fort Benning delivered the first notable success for the AFC with the initial fielding of the Enhanced Night Vision Goggle - Binocular (ENVG-B), which will provide visibility in situations and conditions that would have previously rendered goggles fairly useless, including low-light and no-light subterranean environments. Additionally, ENVG-B’s thermal imaging, rapid target acquisition, and augmented reality capabilities made it particularly attractive to the first U.S. Army unit to receive the ENVG-Bs — the 2nd Armored Brigade Combat Team, 1st Infantry Division, which was preparing for a rotation to Korea.

Soldiers from the 2nd Armored Brigade Combat Team, 1st Infantry Division were the first to receive the Enhanced Night Vision Goggle - Binocular and the Family of Weapon Sights - Individual.

The SL CFT is one of eight cross functional teams across the force tasked to address Army modernization priorities, which include Long-Range Precision Fire (LRPF); Next Generation Combat Vehicles (NGCV); Future Vertical Lift (FVL); Network; Air and Missile Defense (AMD); Assured Positioning, Navigation, and Timing (APNT); Synthetic Training Environment; and Soldier Lethality.

The concept of enhancing Soldier lethality necessitates a strategic focus on the needs and fundamental functions of the 21st century Soldier in respect to shooting, movement and mobility, communications, and protection. The SL CFT’s approach is unique in that it treats both the Soldier and the squad as an integrated combat platform and addresses these requirements in development of Next Generation Squad Weapons (NGSW), the Integrated Visual Augmentation System (IVAS), and that first deliverable, the ENVG-B.

It’s About Time

The process of developing and fielding new weapons and technology has historically taken at least 10 years. When the ENVG-Bs were fielded in September 2019, less than two years had elapsed between the time the need was identified to initial fielding. The ENVG-B requirement was written and approved in 30 days, and though no one is ready to declare it a benchmark, it certainly bodes well for the success of the expeditious modernization model.

The goal of the AFC and the eight CFTs is to work with private industry partners, academia, and PEO Soldier to harness emerging technologies that can be delivered to warfighters faster than ever to achieve this thing.
called “overmatch,” an Army of warfighters trained and equipped to be stronger, faster, better armed, and more skillful than any opponent they might face today, tomorrow, or 10 years down the road. Plain and simple, overmatch means achieving military superiority and keeping it.

To achieve overmatch, we must field faster. To field faster, we employ a process of research and development that centers on an accelerated fail early, fail cheap iterative assessment concept that puts weaponry and technology like the ENVG-B in the hands of Soldiers in a series of limited user events (LUEs), often referred to as Soldier Touch Points, designed to identify problems early in development, fix them, and give them back to the Soldier to try again. Wash, rinse, repeat. The ENVG-B went through 10 iterations of this process.

This teamwork and ownership are essential to the SL CFT’s Developmental Operations Methodology. It’s cost effective and time efficient; it’s systematic and strategic, and it is a radical departure from the tedious and time consuming processes that for too long resulted in the fielding of technologies already outdated and outpaced on the consumer markets and, more and more, military markets abroad.

Achieving overmatch against potential enemy combatants serves a number of purposes, and chief among them is the need to decisively win the wars of today and tomorrow. But overmatch also serves as a mighty powerful deterrent to war and ultimately saves human capital.

Lethality and Survivability

What does lethality look like to the more than 100,000 close combat forces in the active Army, National Guard, and Reserves? It has to start with survivability. Historically, 90 percent of combat fatalities have been members of the close combat force.

The ENVG-B and FWS-I give Soldiers the ability to see through fog, dust, and smoke. The devices increase warfighters’ lethality, mobility, and situational awareness.

The Soldier Lethality CFT balances the need to protect the Soldiers who engage with the enemy while reducing the capabilities gaps that have emerged after two decades of insurgency warfare, a necessary preoccupation that has allowed our peer adversaries, like Russia and China, to narrow what was once our overmatch gulf to a mere gap.

If we were wargaming today, any engagement with our near-peers would be considered a fair fight, and we never want to fight fair. We want our Soldiers better equipped, better trained, and better prepared than any enemy we might face this year, next year, or 20 years from now.

Toward that end, the SL CFT is developing technologies like the ENVG-B that allows Soldiers to shoot from the hip, literally. The dual-tubed binoculars make for much better depth perception than anything previously available. Thermal capabilities are better by leaps and bounds, allowing the user to see through smoke or dust or inclement weather. Soldiers say the best thing about the ENVG-B is its wireless connection to the Family of Weapons Sights – Individual, which gives it that shoot-from-the-hip rapid target acquisition capability. This feature significantly reduces the Soldier’s exposure to enemy fire. No doubt, the ENVG-B increases lethality and survivability.

Down Range

But the SL CFT wastes no time celebrating its success with the ENVG-B, what with rapid prototyping and testing of the IVAS program underway.

The IVAS is fight-rehearse-train integrated headgear with a heads-up display and a digital sensor system that will assimilate with synthetic training environments at the squad level and make a seamless transition to the battlefield. It provides a single “train as you fight” platform that provides squad situational awareness in all operating environments under adverse conditions and limited visibility. From the get-go, proponents have heralded the IVAS for allowing Soldiers to fight “25 bloodless battles” before seeing combat. With the IVAS in the early stages of the prototype-to-test process, Soldiers are already giving the feedback necessary to shape the IVAS into a viable, fieldable system during FY20.

The NGSW program is projected to field in FY22. The NGSW-R, the rifle, is projected to replace legacy systems, such as the M4/M4A1 Carbine, and the NGSW-AR, the automatic rifle, will replace the M249 Squad Automatic Weapon. It will combine the firepower and effective range of a machine gun with the precision and ergonomics of a rifle, yielding capability improvements in accuracy, range, and lethality.

Bridgett Siter serves as the communications director for the Soldier Lethality Cross Functional Team.
The Chemical Reconnaissance and Explosives Screening Set (CRESS) is Joint Program Executive Office (JPEO) for Chemical, Biological, Radiological and Nuclear Defense’s (CBRND) solution to requirements developed by the U.S. Army Maneuver Support Center of Excellence (MSCOE). The CRESS enables members of a maneuver squad, or any out-front unit, to determine if unknown bulk solids, liquids, and trace chemicals are likely to be “prohibited” compounds (precursors for homemade explosives [HMEs]).

Typically target compounds (as well as prohibited compounds) are chemical fuels and oxidizers used to produce HMEs. Current product focus is on fuels such as ammonium and nitrate and oxidizers such as perchlorate and urea, as well as strong acids and bases. Detection of strong acids and bases would indicate materials used in the extraction process for HMEs. The CRESS uses colorimetric technology allowing users easy detection of precursors and pH paper to detect a strong acid or strong base. Testing has proven CRESS can detect unknown bulk solids, liquids, and trace chemicals.

The CRESS is currently being fielded to seven active-duty infantry brigade combat teams (IBCTs) and two National Guard IBCTs. One CRESS kit is issued per squad. The remaining IBCTs are expected to purchase the CRESS kits based on mission requirements. One CRESS kit consists of five samplers, DVD (with instructions), and an instruction sheet.

Each sealed (green) packet — or “sampler” — contains an assay sampler, instruction sheet, wooden sampling spoon, waste bag, pipette (for liquid samples), pH paper (three strips in tube), and protective gloves. The CRESS kit sampler measures approximately 6 inches by 4.25 inches and weighs approximately 6.9 ounces and fits in a uniform cargo pocket.

Two users can easily employ the kit in less than 15 minutes. The CRESS kit was designed with affordability in mind at less than $380 per kit, which contains five samplers. The CRESS kit is a common table of allowances (CTA) item and can be purchased by any military unit (NSN 6665-01-669-4847, CAGE Code: 3XUS9). CRESS has a 48-month shelf life and should be stored in an arms room or other room temperature-controlled storage locations and should not be exposed to freezing temperatures and temperatures over 160 degrees Fahrenheit. The box and the sampler have a temperature label (for temperatures over 160 degrees Fahrenheit) on each of them that when its color changes from white to black indicates the sampler is no longer functional and should be disposed of as a Code F item. It is a Code F item because of the Nessler’s Reagent (contains small amount of mercury) in the ammonium detection chamber. The amount of mercury in a sampler is roughly 2,000 times less than a compact fluorescent bulb (CFL), approximately 218 micrograms vs. 4-6 milligrams in a CFL. After use, a sampler should be disposed of as a Code F item and should be placed in the included red bag for disposal.

For additional information, contact Jeffrey Matz, the program manager for CRESS, at (410) 417-3417.
Current U.S. Army infantry platoon methodology places platoon leaders (PLs) at the decisive point (DP) and in control of their assault element, particularly in the offense. In my opinion, this methodology, which is introduced and reinforced during an officer’s professional military education (including the Infantry Basic Officer Leaders Course [IBOLC] and U.S. Army Ranger School), is inefficient and ill-suited to the tempo of multi-domain operations (MDO), where young officers realistically have a larger span of control than in past operating concepts. While currently valid within the framework of tactical doctrine, overloading the intellectual bandwidth of PLs with subordinate units and processes increases the fragility of the formation by reducing PLs’ situational awareness, limiting their ability to capitalize on opportunity and anticipate contingencies. Furthermore, placing platoon sergeants (PSGs) in a supporting role such as an outer cordon or support-by-fire (SBF) location inhibits their ability to move to and reduce friction points, a primary task of an NCO.

The fighting PSG concept, a more coherent approach in line with the principles of mission command as outlined in Army Doctrine Publication (ADP) 6-0, Mission Command, leverages the experience of the platoon’s senior NCO to control the assault element. In turn, PLs seek the position of highest relative influence in their area of operations (AO) in order to set conditions...
for subsequent phases of the operation and react to the evolving operational environment. This change increases the “antifragility” of platoons by balancing leaders’ span of control and improving their posture in preparation to respond to stressors. The validity of this concept spans all brigade combat team (BCT) variations, constrained only by the individual competency and experience of tactical formations and the willingness of commanders to implement it.

Combat within the MDO concept is inherently intense, rigorous, and complex.¹ Tactical units at all levels will encounter evolving dilemmas against several forms of contact in multiple domains. Compounded with efforts to modernize formations and generate the ability to maneuver across domains, platoon-level leaders will face increasing numbers of subordinate units and activities for which they are responsible. Through the lens of MDO, one can visualize a mechanized platoon maneuvering to seize a foothold following a multinational combined arms breach while engaged in multiple forms of contact.² It is extremely likely FM communications will be jammed and their Global Positioning Systems (GPS) will be spoofed.³ This platoon may also be responsible to synchronize the effects of attached enablers such as electronic warfare specialists and air defense assets in an effort to achieve convergence. While future PLs may not have a large number of traditional assets such as Army attack aviation (AAA) and close air support (CAS), the danger of exceeding their span of control remains.

Mission command is the Army’s approach to command and control that empowers subordinate decision making and decentralized execution appropriate to the situation.⁴ ADP 6-0 directly addresses subordinate decision making as well as the span of control commanders exercise over their formations. Whenever possible, commanders focus on developing branches and sequels, leaving execution of current operations to their subordinates.⁵ The level of control commanders exercise over their formation serves as a function of several considerations highlighted in Figure 1.

Span of control refers to the number of subordinates or activities under the control of a single commander.⁶ Commanders balance width (their span of control) and depth (the layers of command in an organization) to achieve flexibility and responsiveness.⁷ While PLs are not commanders, they do enable subordinate decision making and possess a span of control at the platoon level. PLs’ span of control has direct causation with the fragility of their platoon and the tempo at which they can operate.

One can define fragility as “an accelerating sensitivity to a harmful stressor: This response plots as a concave curve and mathematically culminates in more harm than benefit from random events.”⁸ In contrast, antifragility “produces a convex

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**Figure 1 — Levels of Control (ADP 6-0)**

<table>
<thead>
<tr>
<th>More control</th>
<th>Less control</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Predictable</td>
<td>• Unpredictable</td>
</tr>
<tr>
<td>• Known</td>
<td>• Unknown</td>
</tr>
<tr>
<td>• Inexperienced</td>
<td>• Experienced</td>
</tr>
<tr>
<td>• New team</td>
<td>• Mature team</td>
</tr>
<tr>
<td>• Untrained or needs practice</td>
<td>• Trained in tasks to be performed</td>
</tr>
<tr>
<td>• Being developed</td>
<td>• Established</td>
</tr>
<tr>
<td>• Top down</td>
<td>• Reciprocal information</td>
</tr>
<tr>
<td>• Explicit communications</td>
<td>• Implicit communications</td>
</tr>
<tr>
<td>• Vertical communications</td>
<td>• Vertical and horizontal communications</td>
</tr>
<tr>
<td>• Restrictive</td>
<td>• Permissive</td>
</tr>
<tr>
<td>• Optimal decisions later</td>
<td>• Acceptable decisions sooner</td>
</tr>
<tr>
<td>• Science of war</td>
<td>• Art of war</td>
</tr>
<tr>
<td>• Synchronization</td>
<td>• Orchestration</td>
</tr>
</tbody>
</table>

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**Figure 2 — Decision Making During Execution (ADP 5-0)**

During execution, commanders and staff assess the underlying framework of the plan itself. This involves reexamining the original operational approach and determining if it is still relevant to the situation.
response that leads to more benefit than harm.” Simply put, fragile systems or organizations respond poorly to stressors while performance of antifragile systems improves when exposed to stress.10

Applied to the context of the tactical employment of an infantry platoon in the offense, we can consider variances as stressors. According to doctrine, variances are “a difference between the actual situation during an operation and the forecasted plan for the situation at that time or event.”11 Variances present as opportunities, which enable the accomplishment of the mission more effectively, or threats, which endanger the accomplishment of the mission or the preservation of the force.12 The ability to identify and exploit both opportunities and threats serves as the litmus test of the tactical unit’s antifragility. For example, within current enemy threat doctrine, an enemy subordinate element facing loss of key terrain to U.S. ground assault would likely trigger reinforcement by an enabler, such as an armored reserve. Post assault, a fragile U.S. platoon would likely not be in an appropriate force posture to repel such an element and would require additional resources to resolve the situation. Alternatively, an antifragile U.S. platoon sees the threat as an appropriate time to remove a key element of the enemy’s tactical plan from the battlefield, inhibiting the enemy commander’s tactical flexibility and disrupting his decision cycle. The U.S. Army benefits from antifragile PLS who can exploit variances and think through branch plans.

The Army defines tempo as “the relative speed and rhythm of military operations over time with respect to the enemy.”13 Commanders enable independent subordinate action and initiative through mission command to maintain a tempo appropriate to meet the desired end state.14 GEN Martin E. Dempsey, the 18th Chairman of the Joint Chiefs of Staff and 37th Chief of Staff of the Army, stressed the role subordinate understanding, visualization, and decision making play in recognizing and responding to variances to maintain tempo. He said, “To gain and maintain advantageous tempo, our leaders must be able to see, understand, and rapidly exploit opportunities in both time and space, guided by their understanding of intent, their mission, environment, and the capability of their force.”15 To apply the critical thinking necessary to identify and exploit opportunities on the battlefield, leaders — specifically junior officers — must retain the requisite intellectual bandwidth required to recognize these brief windows. By overloading

A platoon leader (right) and radio-telephone operator with the 1st Battalion, 8th Infantry Regiment, 3rd Armored Brigade Combat Team, 4th Infantry Division, send up a report during training at Camp Buehring, Kuwait, on 24 July 2019.
PLs’ span of control, tactical formations risk the inability to capitalize on fleeting opportunities.

As a recently commissioned first lieutenant and Ranger School graduate, I immediately found myself serving as a mechanized infantry PL during my first platoon live-fire exercise (LFX). During platoon troop leading procedures (TLPs), my PSG and I worked out the distribution of tasks and leader placement during the operation. I would dismount and move to the DP, with one rifle squad entering a trench. My PSG would co-locate with my weapons squad leader (WSL) at the SBF location. Once on the objective, I would send up key calls to the company commander through my radio-telephone operator (RTO). Additionally, I would coordinate the shift and lift fires between the support and assault element with both visual and radio signals, echoed in return by my PSG and WSL. I was responsible for indirect fire targets to prepare for the impending enemy counterattack, and my PSG handled the adjustment of our mounted force posture for the next phase of the operation. Lastly, I was also responsible for timing each rifle squad’s flow onto the objective to maintain tempo. My PSG would handle the reporting and evacuation of any casualties through the NCO support channel.

At the height of the operation, my span of control consisted of three subordinate units and five activities: two rifle squads, a sapper squad, reporting key calls to my company commander, shifting and lifting direct fires, objective exploitation, and control of two indirect fire targets. In contrast, my PSG’s span of control consisted of two units and three activities: two mechanized sections, the redundant check of the lift and shift of our SBF element, coordination of medical evacuation (MEDEVAC), and his role as an M2A3 Bradley Fighting Vehicle (BFV) commander.

A year later, I found myself observing Ranger platoon live fires. Substitute trench line for a military operations on urban terrain (MOUT) compound and BFVs for CH-47 Chinooks as methods of infiltration, and the scenarios were rather similar. The execution, however, could not have been more different. As I observed from the SBF location, I noticed the PL move onto the berm with several enablers. The PSG moved with the assault element to its last covered and concealed position outside the compound. The PL adhered to the fundamentals of a raid, initiating the attack with the most casualty-producing weapon systems and echeloning fires appropriately. However, rather than focusing on the execution of tactical tasks by his weapons squad, he issued curt, frank guidance on when to shift and lift fires based on the posture of the assault position and effects on the enemy. The WSL did not need a double check to ensure he executed to standard; a high degree of mutual trust within the formation allowed an acknowledgement to suffice. The PL remained focused on the broader tactical fight, controlling assets and sensors through its attachments. As contingencies arose, he proved able to allocate various assets based on lethality and responsiveness to deal with the threat. The co-location of the PL at the SBF enabled the WSL to keep better situational awareness of assets influencing the objective and adjust his weapons control status and rate of fire accordingly. As such, the responsiveness of enablers such as AAA increased due to direct communication. The result was more timely and lethal effects on the battlefield. On the objective, the PSG made intuitive decisions based on his experience gained through years of training cycles and deployments. The PL kept him abreast of pertinent information to his tactical decision-making cycle, such as enemy reinforcements, time of suppression remaining, and enabler playtime. His direct control of the med on target expedited triage and treatment, and the PL proved capable of facilitating MEDEVAC from his position.

Through this training event, it was clear this platoon retained several tactical advantages that I had previously forfeited by placing myself at the DP during my own LFX. Despite significantly more assets and enablers, the Ranger PL’s span of control did not exceed my own. In this specific training event, the PL’s placement at the SBF location provided him the maximum influence over his formation. The organizational flexibility inherent in his leader placement and balanced assignment of tasks enabled platoon-level leaders to shape the next phase of their operation prior to the completion of their actions on the objective. Furthermore, they retained the requisite situational awareness to exploit an unforeseen threat manifested as an enemy quick reaction force (QRF). Their organization passed the litmus test and proved antifragile. My platoon, on the other hand, would have been hard pressed to repel or defeat an enemy counterattack; my lack of tactical bandwidth prevented my looking beyond the trench I found myself in.

Army Techniques Publication (ATP) 3-21.8, The Infantry Platoon and Squad, deliberately does not dictate the exact location of the PL during offensive operations. It does specify, however, that: “The PL places himself where he is most needed to accomplish the mission,” and “[t]he PL maneuvers/controls squads and fighting elements.”16 (See Figure 3 for the complete list of duties and responsibilities based on BCT type.) This ambiguity provides platoons the flexibility to determine leader placement based on operational variables but dictates that PLs personally maneuver squads. Additionally, the duty description for both mechanized and Stryker PLs explicitly mentions that the PL “usually dismounts with the dismounted element.”17

While a core competency of small unit infantry formations remains operating in complex terrain such as urban environments, the dismounted assault element often ends up as the decisive element for both enemy and terrain-based tactical tasks. Furthermore, institutional norms reinforce to young lieutenants that the PL maneuvers with and controls the assault element. Both IBOLC and Ranger School instruct the PL to move with the assault element, the nested decisive operation, as a best practice. The Ranger Handbook does not specify PL placement during a deliberate attack. However, it does dictate that during a platoon attack battle drill the PL maneuvers with the assaulting element.18 In
### Tasks common to all BCTs
- Leads the platoon.
- Conducts troop leading procedures.
- Maneuvers squads and fighting elements.
- Synchronizes the efforts of squads.
- Looks ahead to the next “move” of the platoon.
- Requests, controls, and synchronizes supporting assets.
- Employs mission command systems available to the squads and platoon.
- Checks with squad leaders ensuring 360-degree, three-dimensional security is maintained.
- Checks with weapons squad leader controlling the emplacement of key weapon systems.
- Issues accurate and timely reports.
- Places himself where he is most needed to accomplish the mission.
- Assigns clear tasks and purposes to the squads.
- Understands the mission and commander’s intent two levels up.
- Receives on-hand status reports from the PSG and squad leaders during planning.
- Coordinates and assists in the development of the obstacle plan.
- Oversees and is responsible for property management.
- **Normally dismounts when the situation causes the platoon to dismount.**
- Serves as Bradley commander when mounted.
- **Develops the fires plan with the PSG, section leaders, and squad leaders.**
- As leader of Section A, keeps his crew and wingman informed.

### Tasks unique to ABCT IN PLTs
- Ensures the platoon is prepared to accomplish its mission.
- Updates PL on appropriate reports.
- Prepares to assume the role and responsibilities of the PL.
- Takes charge of task-organized elements in the platoon during tactical operations, which may include but is not limited to, quartering parties, support elements in raids or attacks, and security patrols.
- Monitors the morale, discipline, and health of the platoon.
- Positions where best needed to help the engagement (either in the base of fire or with the assault element).
- Receives squad leaders’ administrative, logistical, and maintenance reports, and requests rations, water, fuel, and ammunition.
- Requests logistical support from the higher headquarters and usually coordinates with the company’s first sergeant or executive officer.
- Ensures Soldiers maintain all equipment.
- Ensures ammunition and supplies are properly and evenly distributed after the platoon consolidates on the objective and while the platoon reorganizes.
- Manages the unit’s combat load prior to operations and monitors logistical status during operations.
- Establishes and operates the unit’s casualty collection point (CCP). This includes directing the platoon medic and aid/litter teams in moving casualties, maintains platoon strength level information, consolidates and forwards the platoon’s casualty reports, and receives and orient replacements.
- Employs the available digital mission command systems to the squads and platoon.
- Ensures Soldiers distribute supplies according to the PL’s guidance and direction.
- Accounts for Soldiers, equipment, and supplies.
- Coaches, counsels, and mentors Soldiers.
- Upholds standards and platoon discipline.
- Understands the mission and commander’s intent two levels up.
- **Controls the mounted element when the PL dismounts; or dismounts with, commands, and controls the platoon when necessary (mission, enemy, terrain and weather, troops and support available, time available and civil considerations [METT-TC] dependent).**
- Serves as a Bradley commander when the platoon operates mounted.
- Directs the platoon’s casualty evacuation process during mounted or dismounted operations.

### Tasks unique to SBCT IN PLTs
- Platoon Leader
- Platoon Sergeant

that specific case, however, the lack of a deliberate planning process associated with battle drills may justify the increased control of the PL in that context due to the inherent increased risk of fratricide in a battle drill without pre-determined direct fire control measures.

Additionally, the role reversal between PLs and PSGs better aligns with an officer development model established in mission command. GEN Dempsey also stressed the need to instill the tenets of mission command into officers as early as possible through all three domains: institutional, operational, and self-development. Officers are encouraged to prepare for higher levels of command by exercising organizational leadership over direct leadership when applicable in subordinate commands. The fighting PSG concept serves as the manifestation of the principles of disciplined initiative within intent and mutual trust in the operational domain. Implementing this structure ingrains in young officers that their position belongs at the point on the battlefield where they have the greatest influence over their formation and all associated elements, whether that is at the last covered and concealed position, SBF position, the turret of a Bradley, or the hull of a Stryker. Lieutenants must learn to delegate authority to lower levels to complete their mission. Such conditioning precludes the micromanaging tendencies that often grip Infantry commanders. As their rank and subsequent span of control increases, Infantry officers must become comfortable with empowering other leaders in their formations. Where better to start teaching these lessons than in their first platoon?

As in all decisions, implementation of the fighting PSG concept entails an opportunity cost of its own. Eventual first sergeants tasked with coordinating MEDEVAC and logistical resupply at the company level would lack the focused experience of routinely doing so at the platoon level prior to assuming that responsibility. While critical, labor-intensive, and often complicated, these sustaining tasks are not beyond the skill level of a senior NCO selected to serve as a first sergeant. Furthermore, the ability of the PSG to immediately respond to casualties at the most likely point of injury and provide direction to the platoon medic poses the unit to immediately respond to and reduce a common point of friction inherent to combat operations.

Ingrained institutional norms serve as a barrier to application of a force-wide implementation of the fighting PSG concept. Maneuver leaders at all levels draw on their experience in the existing institutional pipeline such as Ranger School and IBOLC as the foundation of small unit tactics, as they well should. However, through candid cross-examination of mission variables against subordinate leader talent force-wide, leaders at echelon should encourage non-traditional task delegation within their platoons in maneuver training. Recent updates to mission command doctrine include competence as a principle of mission command. If an individual lacks the requisite competence to lead a maneuver element, it is the responsibility of higher headquarters to make necessary adjustments. Commanders are inherently responsible for the assessment of their subordinates to discern their tactical capabilities. This includes the delegation of authority to a PSG to control a platoon assault element. If unsuccessful, the worst case scenario results in a failed platoon field training exercise (FTX) or LFX lane and valuable “leader down” repetitions for the platoon’s senior NCO. Traditional LFX risk-mitigation procedures serve to prevent a catastrophic accident resulting in injury or death to Soldiers. Successful execution, however, holds the potential to increase the lethality of even the best tactical units.

Regardless of BCT type — mounted or dismounted — the fighting PSG concept remains a viable alternative for infantry formations to increase their lethality on the battlefield through a more efficient delineation of tasks. Leveraging the experience of our senior NCOs in the offense bears significant potential to increase flexibility and responsiveness in our rifle platoons and decrease fragility. In preparation for the complexity and tempo of MDO and in line with the tenets of mission command, leaders at echelon should exercise mutual trust and maximize the effectiveness of their organization.

Notes

1 Training and Doctrine Command (TRADOC) Pamphlet 525-3-1, The U.S. Army in Multi-Domain Operations 2028, 30 November 2018, XI.
2 Ibid, 9.
3 Ibid, 12.
4 Army Doctrine Publication (ADP) 6-0, Mission Command, 31 July 2019, 1-3.
5 Ibid, 1-4.
6 Ibid, 4-14.
7 Ibid.
9 Ibid.
11 ADP 5-0, The Operations Process, 31 July 2019, 4-5.
12 Ibid.
13 ADP 3-0, Operations, 31 July 2019, 2-8.
14 Ibid.
17 Ibid, 1-86.
20 ADP 6-0, 2-1.
21 Ibid, 1-7.
22 Ibid, 2-23.

CPT Curtis Garner is currently serving as the assistant operations officer for the 3rd Infantry Brigade Combat Team, 101st Airborne Division, Fort Campbell, KY. His previous assignments include serving as a rifle platoon leader with the 1st Battalion, 66th Armor Regiment, 3rd Armored Brigade Combat Team, 4th Infantry Division; and various positions in the Regimental Special Troops Battalion, 75th Ranger Regiment. CPT Garner graduated from the U.S. Military Academy at West Point, NY, in 2014 with a bachelor’s degree in management.
For the last few years, the U.S. Army has begun a major shift in training to focus on countering near-peer, well-equipped, and well-funded adversaries fighting with an assortment of mechanized infantry and armored platforms far more capable than the typical insurgency. This means a transition from attempting to win a low-tempo “hearts-and-minds” game to winning a high-tempo, large-scale, combined arms fight against a smarter, modern enemy. This transition to better engage a differing mix of enemies reflects the nature of war itself. Tactics, techniques, and procedures (TTPs) are constantly evolving as the enemy encounters our weapons’ effects, just as we upgrade our weapons and training to counter his advantages.

This is especially true in our infantry brigade combat teams (IBCTs), which have limited resources to counter bunkers, tanks, and other protected adversarial assets. In response to this deficiency, the 82nd Airborne Division has begun experimenting with a Mobile Protected Firepower (MPF) company to augment its light battalions. The MPF platform promises to be a 30-ton tracked vehicle equipped with a 105mm direct fire precision weapon system. Currently, the role has been filled with Marine Corps light armored vehicles (LAV-25), equipped with the appropriate laser engagement system (Multiple Integrated Laser Engagement System [MILES]) to simulate the MPF. The Army has chosen two prototypes to evaluate within the 82nd Airborne in 2021. The product of this and other evaluations will determine the platform of the proposed MPF units to be activated within the IBCTs in 2025.

In the photo above, 82nd Airborne Division Paratroopers integrate armor enablers to support combined arms training. Soon, Infantry brigade combat teams will have organic light armor mobile protected firepower companies to provide them with additional firepower to counter near-peer threats.

Photo by SSG Jason Hull

Mobility, Shock, and Firepower: 
Light Armor-Infantry Operations in the Past, Present, and Future

1LT STANLEY DIDDAMS

“Armor in the future must fly, just as all other means of war must fly. Possessing good cross-country mobility, and gunned to destroy any earthbound vehicle, the tank will play the decisive role in the coming battles of the airheads.”

— MG James M. Gavin

For the last few years, the U.S. Army has begun a major shift in training to focus on countering near-peer, well-equipped, and well-funded adversaries fighting with an assortment of mechanized infantry and armored platforms far more capable than the typical insurgency. This means a transition from attempting to win a low-tempo “hearts-and-minds” game to winning a high-tempo, large-scale, combined arms fight against a smarter, modern enemy. This transition to better engage a differing mix of enemies reflects the nature of war itself. Tactics, techniques, and procedures (TTPs) are constantly evolving as the enemy encounters our weapons’ effects, just as we upgrade our weapons and training to counter his advantages.

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Photo by SSG Jason Hull
The concept of augmenting expeditionary, light infantry organizations with armor is not new. Examples include general headquarters (GHQ) tank battalions that were tasked to support light infantry in World War II and Korea, or the 73rd Armor Regiment which air-dropped Sheridan tanks into Panama. These and many more historical, doctrinal evolutions produced a plethora of lessons learned on the subject of light tank-infantry integration. However, in the 82nd Airborne Division, which has been without an armored component since 1996, many of these lessons have been lost or discarded. It is valuable, therefore, to examine history as we develop our plans for the future. This article will examine several relevant historical vignettes and then discuss the lessons learned and how they apply to the development of future light armor doctrine.

**Operation Torch and the Development of Tank-Infantry Tactics**

The Army published doctrine prior to the invasion of Africa that would be tested and developed throughout the duration of Operation Torch. Field Manual (FM) 7-5, *Organization and Tactics of Infantry - The Rifle Battalion*, governed infantry tactics altogether. In this manual, infantry leaders were instructed that when their attacks were supported by tanks to advance their units as close behind the tanks using the same maneuvers they would if not supported by tanks.\(^2\) The manual instructed infantry leaders to assume that the tank units would conduct battle the same as they would without infantry as well. FM 17-10, *Tank Platoon*, which governed tank tactics, allotted GHQ tank battalions to be attached to higher echelons and distributed amongst infantry organizations as needed. The FM still assumed that infantry would follow behind, as dictated by FM 7-5, except for when they encountered anti-tank weapons. Infantry units would be expected to destroy anti-tank weapons using “stalking and infiltration tactics.”\(^3\)

While there was consistency in doctrine for both tank and infantry leaders, it would take a number of failures before commanders could effectively employ the tanks with the infantry. The armored units employed in Africa were not GHQ battalions and were therefore not trained to work with the infantry. The mass attacks that tank commanders had expected to conduct were not possible in the rugged terrain of North Africa.\(^4\) Tanks were forced to be dispersed as infantry support in much smaller numbers than what was originally planned. Infantry commanders did not know what to do with the tanks when they received them. Initially, infantry units, attempting to locate and fix their enemies while leaving their tanks behind, would be pinned down and destroyed with indirect fire. In other cases, when tanks were moved to the front, they would move too fast for the infantry to keep up, running themselves into anti-tank fire. When the infantry did keep close, they would often absorb fire meant for the tanks.\(^5\) The tanks were being moved around so often they were typically unable to develop cohesion with their infantry counterparts as a combined arms unit and to develop effective TTPs. They also had trouble accessing spare parts and crew replacements. The chief of the Armored Force, LTG Jacob L. Devers, wrote the following to GEN George Marshall in 1942: “Economy of force and unity of command go together. You get little of either if you get a lot of attached units at the last moment. Team play comes only with practice.”\(^6\) Devers’ note to Marshall reflected what the Americans had been learning while fighting. In Africa, organizations in which tanks and infantry were attached together for extended periods ultimately became highly capable in battle.\(^7\)

**The 504th and the 740th Advance on the Siegfried Line**

On 28 January 1945, C Company of the 740th Tank Battalion (GHQ) was attached to the 504th Parachute Infantry Regiment (PIR) of the 82nd Airborne Division for the advance on the Siegfried Line. They were equipped with M4 Sherman tanks each with a 76mm cannon, two 30-caliber coaxial and bow machine guns, and a 50-caliber pintle-mounted machine gun on top of the turret. One tank platoon from C Company was attached to each of the three battalions of the 504th. Their objective was the town of Herresbach, Belgium, and they would be the right flank of the 1st Army. The 3rd Platoon from C Company of the 740th and 3rd Battalion of the 504th would lead the attack. Snow and fog covered the advance down a single narrow trail. Single tanks led Paratroopers marching in columns of two spaced at platoon interval.\(^8\) For the first 7,000 yards of the advance, the column encountered only minimal resistance consisting of machine-gun and small-
arms fire. At that point the column was notified of a German counterattack to their north. Four tanks assembled at the front of the formation, and infantry climbed on to maneuver towards the suspected enemy.

The German and American columns stumbled upon each other, and without hesitation American Paratroopers and tanks jumped into action, seizing the initiative. The lead tank opened with its full complement of machine guns as well as its main cannon while Paratroopers on the ground charged forward, firing from the hip. The violent combined arms action was over in 10 minutes with the 504th reporting more than 100 Germans killed and approximately 180 captured. Not a single American casualty was reported. The town of Herresbach was seized within an hour.

Interspacing tanks among infantry platoons along the canalizing trail to Herresbach allowed for optimal security and firepower spread throughout the formation. Upon notification of contact, the ability of riflemen to ride towards the enemy on top of a platoon of tanks no doubt increased the concentration and tempo of the movement to contact. The ability of the tank-infantry team to react to such a large enemy force so decisively in so little time was a result of mobility, shock, and firepower that would have been lacking without armor support.

The Infantry-Armor Task Force in Korea

As the war in Korea progressed into 1951, especially in the west where terrain was more forgiving, American and United Nation forces were regularly conducting combat operations in infantry-armor battalion task forces. Typically, an infantry regiment consisting of three battalions had a tank battalion of four companies in support, and each battalion would have one or two tank companies attached in addition to other enablers such as engineers, artillery, and reconnaissance companies. These infantry-armor task forces were successful in limited objective attacks such as the attack on Osan-Suwon on 15 January 1951. The 27th Regimental Combat Team (RCT) was organized into three task forces of the 27th Infantry Regiment, supported by the 89th Tank Battalion. Task Force Baker — consisting of Soldiers from the 2nd Battalion, 27th Infantry Regiment and C Company, 89th Tank Battalion — spearheaded the attack on Suwon. Their rapid advance coupled with the shock effect and firepower of their armor enablers caught the defending enemy off guard, inflicting 200 casualties. The RCT continued towards and into Suwon on the 16th and 17th with additional air support. With shock and surprise, the RCT engaged enemy forces on top of and inside buildings, flushing them out onto the street kill zones with air and ground fire. By the end of the operation, an estimated 1,150 enemy were killed at the cost of a single American casualty.

Similar infantry-armor task-force concepts were put to use successfully in several additional operations of this time period. Notable is Operation Punch in February of 1951, in which the 25th Infantry Division would attack to seize two hilltops outside of the town of Suwon. Two separate task forces were assembled from the 64th and 89th Tank Battalions and the 1st and 2nd Battalions of the 27th Infantry Regiment. The plan consisted of the tank battalions launching penetrating attacks to the flanks and rear of the hilltops while infantry attacked up the hills themselves. The armor teams were not meant to seize or secure any terrain, only to disorganize and disrupt the enemy to inflict maximum casualties and then withdraw. In the flanking maneuver, each tank company was teamed with an infantry company, and both commanders remained together, physically, for the duration of the operation. Typically, the infantry commander would ride on the back deck of the armor commander’s tank. The operation ended with a reported 4,251 enemy killed at the cost of 100 allied casualties.

3-73 Armor and Operation Just Cause

In the early morning of 20 December 1989, C Company, 3rd Battalion, 73rd Armor Regiment, air-dropped 10 M551A1 Sheridan tanks to the east of the Tocuman-Torrijos Airport in Panama as part of Operation Just Cause. The light tanks of this unique division-organic tank battalion were equipped with a 152mm main gun, 7.62mm coax, and the commander’s .50 caliber pintle-mounted machine gun. Of the 10 vehicles dropped into Panama, eight were made operational and organized in sections to each of three parachute infantry battalions present, with one section establishing a blocking position at the entrance of the airport. Soldiers from the 1st Battalion, 504th Infantry Regiment made direct contact with the Panamanian Defense Force (PDF) when they were ambushed by a machine-gun position while clearing an obstacle not far from the drop zone. The lead tank commander immediately opened fire with his .50 caliber machine gun, and his wingman, upon acquiring the enemy location, fired a single 152mm high explosive (HE) round, causing the side of the building occupied by the enemy to collapse. Enemy fire ceased, and the infantry battalion reduced the obstacle and continued. Later on the same route, Sheridans and infantry encountered another obstacle consisting of an apparent vehicle-born improvised explosive device. The obstacle was reduced by firing a single 152mm HE round. When the smoke cleared, the tanks pushed the wrecked vehicles aside, and the route was open.

Elsewhere, Sheridans were being put to work on the offensive against the PDF’s Commandancia complex and airborne and ranger training base. In the former, Sheridans used their main cannon to knock down walls and open areas for dismounted maneuver. They fired HE rounds into buildings as preparatory fires prior to the infantry entering and clearing. The HE rounds killed occupants and drove the enemy into a state of confusion and discord before being swept away by the precise urban maneuver of the Paratroopers. In the latter, the company commander of the armor-infantry team took his position at the deck of one of his attached Sheridans and manned the dismount telephone to coordinate direct fires, putting tanks to good use while preventing fratricide. In contrast to prior infantry-armor operations, the Paratroop commanders knew the capabilities of their permanent armor...
enablers, and likewise the Sheridan crewmen knew how their infantry counterparts fought. Together they produced a lethal and highly successful team. Tanks were available to assist their infantry counterparts in the joint forcible entry almost immediately after hitting the ground and provided much-needed mobility, shock, and firepower to keep Paratroopers moving from the airhead to their objectives while minimizing casualties. C Company accomplished its mission and returned home from Panama with only one crewmember wounded.

A Company, 4th Battalion, 68th Armor at the Joint Readiness Training Center (JRTC)

In June 2019 at JRTC at Fort Polk, LA, the 82nd Airborne Division’s MPF Company brought three platoons of Marine Corps LAVs equipped with MILES simulating a 105mm auto-loading cannon and 30 tons of armor. The company supported the 1st Brigade Combat Team in the airborne joint forcible entry, followed by defensive and finally offensive operations against a near-peer mechanized enemy. The initial plan was to task each of the three platoons to a habitual parent infantry battalion, with one platoon being air-dropped and the other two arriving by air-land. Immediately upon air drop, a platoon of MPF vehicles were made available to the brigade commander to support the infantry battalions as they expanded their control over the airhead. After encountering minimal resistance, the platoon was attached to the 2nd Battalion, 501st PIR and assisted in repelling multiple mechanized infantry counterattacks over three days until it was finally destroyed by enemy armor.

The morning after, a two-vehicle section that was initially attached to the 1st Battalion, 504th PIR was re-routed to the 2nd Battalion, 501st PIR in order to supplement that battalion’s defense. The receiving company commander provided clear and brief guidance to provide a defensive battle position (BP) facing down a narrow road with platoons of infantry occupying BPs at the flank. Around midnight an enemy armored battalion column approached the company engagement area. As planned, infantry attempted to engage enemy armor first with their displaced anti-tank systems with limited success. The MPF section then began engaging enemy armor with immediate effects. Initially, the enemy focused on the displaced infantry arrayed in the tree line at their flank. A few BMPs identified and fired back at the engaging MPF section, but their 30mm cannons had no effect on the frontal armor of the MPF platform. The section expended all of its ammunition in the space of 20 minutes, destroying a company-sized element of T-80s and BMPs. Continuing to receive only 30mm fire, the section arranged its vehicles to form an effective road block, and the enemy armored column was completely halted. It was the first time in recent history that a light brigade had been able to effectively stop the advance of the armored counterattack at JRTC.

Following the defense, the MPF Company was reconstituted and divided up into three armor-infantry teams, two of which were tasked with breaching enemy defenses around the stronghold town of Sangari and passing displaced Paratroopers onto the objective. These teams were augmented with M1A2 72-ton main battle tanks in addition to the MPF platforms. On the approach, the teams took little contact until a section of both MPF vehicles and M1A2s were mistaken for enemy armor and destroyed by friendly displaced anti-tank systems. After absorbing this significant loss, the teams continued to the objective, meeting and destroying enemy armor and successfully opening the breach for infantry to follow through.

Lessons for the Future

The bottom line is that success of the light armor-infantry team, as with any enabler, is predicated first on the combined understanding of each other’s capabilities and limitations by both armor and infantry leaders, leading to harmonious coordination between crew members and dismounts. This is best achieved through repeated MPF-infantry maneuver training at battalion and below level with organic or habitually attached MPF crews. In a mission-command environment, the efficacy of armor enablers in
training and the development of strong TTPs is limited to a well-informed commander’s creativity and willingness to take prudent risk. Once this habitual training relationship is achieved and strong TTPs are established among leaders, success on the battlefield will follow.

While this formula for success may seem trivial to commanders who have spent their careers in armored and mechanized organizations, IBCTs typically lack personnel with mechanized experience or understanding of armor doctrine. This general lack of understanding of armored capabilities and doctrine among leaders in IBCTs is also dangerous in that it has created a prevalent attitude of rejection towards the armored force. Light infantry commanders and staff typically believe they can accomplish their mission without armor because they have been doing so for decades. History has shown, however, that permanent light armor augmentation is an incredible force multiplier, which will allow the IBCT to accomplish much more.

Whether light infantry commanders want it or not, the MPF company will become a part of IBCTs in the near future. For those commanders who find themselves with armor enablers for the first time in their formations and don’t know how to employ them, I offer that there is no right answer, but experience and history has taught us to adhere to these key principles:

1. **The MPF requires local security provided in the form of dismounts or a wingman vehicle.** Successful combined arms teams can be formed between two or more MPF platforms, an MPF and a machine-gun-equipped HMMWV, or preferably an MPF and a squad of riflemen. Dismounts are ideal because it is critical to cover the dead space around the vehicle and prevent infiltration.

2. **Avoid deliberately maneuvering the MPF platform off road through low ground or loose sand and soil.** A thorough terrain analysis should be conducted at a minimum via a map reconnaissance to determine severely restricted terrain. You don’t want your vehicles to get stuck.

3. **Make use of engineer assets to provide hull defilade fighting positions.** The MPF platform benefits from the smallest silhouette possible while still being able to traverse its turret.

4. **Give the MPF clear lines of sight and maximum standoff.** The MPF is equipped with precision, high-velocity, direct fire, laser-ranged weapon systems firing both kinetic and chemical ordinance. These weapons systems can affect every perceivable land target accurately and easily at least 3,000 meters away.

5. **Plan to make Class III resupply available to the MPF on a daily basis and plan to make Class V resupply available during offensive or defensive action against armor or armored targets.** The MPF in contact with armor will run out of main gun ammunition quickly. Ensure that the MPF platoon sergeant and battalion S4 have made contact during logistical planning.

6. **The infantry planner should have constant access to the MPF platoon leader prior to execution.** During execution, the combat commander should prioritize his control of the MPF. The MPF will most likely be the combat commander’s most casualty-producing weapon system and best enemy detection system. Employing it at the center of mass of the operation is critical and enabled by keeping the MPF leader physically with the tactical planner prior to (and decision maker during) combat operations.

Adherence to these principles and the lessons history teaches us, coupled with the application of common sense, will set your operation up for success. When the platform arrives, its technical specifications will no doubt affect its maneuverability and combat capabilities. The key is to train together, take risks, and make mistakes, then train again, and again, and again.

**Notes**


2. Field Manual (FM) 7-5, Organization and Tactics of Infantry — The Rifle Battalion (1940), 73.


11. Ibid, 166-175.


At the time this article was written, 1LT Stanley Diddams was serving as a platoon leader in A Company, 4th Battalion (Airborne), 68th Armor Regiment (Provisional), 1st Brigade Combat Team, 82nd Airborne Division. Special thanks to Dr. Robert Cameron for research guidance and CPT Aram Hatfield for editing.
Mission Command of Highly Synchronized Operations at NTC

CPT JARED HIRSCHKORN

The brigade combat team (BCT) staff officers I had the opportunity to observe, coach, and train at the National Training Center (NTC) at Fort Irwin, CA, had a thorough understanding of both the definition and the importance of mission command. It is safe to say that most of our tactical leaders well understand this doctrine. However, in the following paragraphs, I will argue that we have developed a habit of rigid adherence to this doctrine of flexibility. This one-dimensional understanding and practice of mission command contributes to significant challenges in the execution of the defense and the combined arms breach — two operations that typically require a high degree of synchronization and detailed planning.

The BCT combined arms breach, as envisioned by Army doctrine and as practiced at NTC, is a task that requires highly synchronized actions across multiple battalions. It is a symphony of maneuver and destruction. At various times and places in just the breach operation alone, the BCT synchronizes fires for effective obscuration and suppression, maneuvers multiple battalions, reduces obstacles, coordinates rotary and fixed wing effects, and synchronizes the delivery of cyber and electronic warfare effects, while simultaneously executing protection, intelligence, and sustainment functions. Within this symphony, when single players deviate from the sheet music, they can quickly unravel the entire operation. For example, if the reduction element commits to the breach before the support by fire is set or the suppression and obscuration delivered, they are likely to see losses approaching 100 percent. In this situation, independent initiative that is asynchronous to the planned operation is quite risky. This is a common occurrence during rotations at NTC and often results in the BCT getting another chance at the breach the following day.

During rehearsals and operations order briefs, I often hear Army leaders say that we need to get everyone on the same sheet of music. After hearing a leader say this, the question in my mind is often, “what music are we trying to play?” If we’re playing classical music, then being on the same sheet of music means we’re conducting an operation in which...
every single note is dictated and synchronized across all the other functions (instruments), and there is very minimal room for individual initiative. If we’re playing jazz, then there is room for improvisation as long as the soloists know how to respect the harmonic progression and rhythm of the backup. If we’re playing postmodern music, then we can have 200 people sit in a room and scream for five minutes and call it music. My point is that “being on the same sheet of music” in some cases contradicts the philosophy of broad intent and disciplined initiative. The “what music” question can be properly translated as “what mission are we trying to accomplish?” Some operations require more control than others.

Brigade defensive operations are an area where the philosophy of flexibility embodied by mission command has contributed to leaders avoiding aspects of the detailed coordination required of such an operation. This, in combination with a lack of repetitions in the defense, has led to challenges in our execution at the BCT level. Army doctrine states that in the defense the BCT designates obstacle intent in belts or groups and assigns this area and effect to subordinate battalions. That’s all well and good until the subordinate battalions try to achieve a fix effect without any dozers or concertina wire. No amount of disciplined initiative is going to make the D7 bulldozers suddenly appear in the engagement area or get the minefield approved by division. In order to accurately assess, integrate, and synchronize the dig assets, class IV, volcanos, division-approved minefields, and situational obstacles in the time and resource-constrained environment of NTC, the BCT planners must basically design a complete defensive plan.

Furthermore, once the BCT assigns blade assets to a certain battalion, the distance between engagement areas often eliminates the ability to shift these assets to other areas of the battlefield. Once these things are taken into consideration, the best course of action is often for the BCT to dictate to battalions what obstacles to emplace. The battalions will deviate and refine from that order in the interest of common sense and other factors (mission, enemy, terrain and weather, troops and support available, time available, and civil considerations [METT-TC]). However, dictating which specific obstacles to build also makes battle tracking easier, since it’s much harder to calculate what percentage of a block a unit has achieved versus what percentage of a 1,000-meter anti-vehicle ditch is complete with already understood start and end points. Our current approach, shaped by an emphasis on flexibility and disciplined initiative, often fails to fully synchronize and integrate the necessary elements for a successful defense. By most accounts, in the 1980s the Army practiced a rigid system of command and control exemplified by the war plans for Soviet invasion into Western Germany. The Army practiced the execution of these plans ceaselessly, and the plans were quite detailed. However, the current generation of battalion commanders have conducted counterinsurgency operations for most of their careers. Counterinsurgency operations inherently require significant flexibility and wide-ranging initiative. Presently, the Army doesn’t have the same fluency with decisive action operations as maybe it once did in the 1980s and 1990s. The pendulum has swung to the other side. Maybe, to get somewhere back to the middle, we should assess whether our philosophy of mission command — embodied by mission orders, intent, and disciplined initiative — has perhaps blinded us to the reality that some operations necessarily require tightly controlled synchronization and highly detailed plans. Then, let us do the detailed staff work and planning with the understanding that even operations designed for maximum control will likely require some degree of independent initiative. However, our increased focus on the details of the plan will pay dividends in execution, even if the plan changes.

Notes

1 Army Techniques Publication (ATP) 3.90-8, Countermobility, 2014, paragraph 2-7.
Countering Weapons of Mass Destruction:

The Mission That Every Unit in the Army Has... But Doesn’t Know It... Yet

MAJ JAREW W. NICHOLS

In an increasingly volatile, uncertain, complex and ambiguous operating environment, not many things in the world are certain.1 One thing that is certain is that conventional forces will have a significant role to play in countering weapons of mass destruction (CWMD) operations. Therefore, all conventional units in the U.S. Army need to be familiar with the concepts of CWMD operations because units could potentially face WMD on the battlefield or during stability operations.

This article is a synthesis of the lessons learned from the year and a half that the 1st Battalion, 16th Infantry Regiment spent training and serving as a CWMD task force in the Republic of Korea (RoK). The following will discuss the mission, how to train for it, and challenges that exist in current CWMD operations.

CWMD operations are defined as “activities across the U.S. government to ensure that the United States, its armed forces, allies, partners, and interests are not attacked or coerced by actors of concern possessing [WMD]. CWMD operations are inclusive to the prevention of the use of nuclear and radiological weapons, biological weapons, chemical weapons [and] cruise and ballistic missiles, or other improvised mass-destruction weapons.”2

From the perspective of conventional forces, we often view these functions as responsibilities of politicians or leaders in the Department of State, but the fact is that we all have valuable roles to play in CWMD. CWMD operations are essential in preventing the spread of technology or means of its implementation by both actors and non-state actors.

Since we all have a role, we all need to better understand the role of conventional forces.

Why Conventional Forces?

The size and scope of CWMD operations are too large for special purpose forces alone to execute. For example, in North Korea, there are thousands of possible CWMD special-interest sites.3 Locating, exploiting, and securing all these sites could take months, if not years, to complete. Even if the North Korean regime collapses from internal pressure or external conflict, the problem would remain.

In the event of the collapse of any other foreign country, the security of possible WMD sites would be a mission that U.S. and coalition forces will assume.

While North Korea is the most notable modern example, the possibility of these types of operations extends to...
operations in wartime or even in peace. CWMD exists in offense, defense, stability, and defense support of civil authorities (DSCA) operations.

**CWMD History**

CWMD operations are nothing new. Since 1945, it is clear that maintaining the technological advantage the United States has over its peers is key to keeping the current world order. The proliferation of technologies and WMD unsettles the world order and causes strategic shifts in the balance of power.

For example, in the days following Germany’s collapse in 1945 and that of the Union of Soviet Socialist Republics (USSR) in 1991, the proliferation of weapons and technologies established the foundation of the current world order. When Germany collapsed, both the United States and the USSR raced across Europe to secure V-2 rocket and research sites. Following the USSR’s collapse, both state and non-state entities acquired WMDs and associated technologies, spreading the threat of new WMD-armed states.

Looking to the future, the likelihood increases of a breach in the security of a WMD or the frightening use of WMDs against military or civilian targets. In the past, only state actors employed WMD. However, in the future, non-state actors could play a more significant role in developing or employing WMDs. Therefore, securing possible WMD sites will continue to play a considerable strategic role in maintaining the worldwide balance of power and defending U.S. strategic interests.

Agencies like the International Atomic Energy Agency (https://www.iaea.org) and the Comprehensive Nuclear-Test-Ban Treaty Organization (https://www.ctbto.org) exist to monitor the use of nuclear and WMD materials around the world. These organizations are comprised of scientists and specialists with specific knowledge of WMDs, but these organizations are tiny. While they maintain all the core knowledge on WMDs, they do not have the requisite manpower to execute on behalf of the United Nations or the United States. Augmentation and development of specialized task forces are the means by which CWMD operations become feasible.

A myriad of organizations and stakeholders in CWMD operations come together to form CWMD task forces. Much like in the aftermath of World War II, conventional forces are assigned to enable specialized teams to secure materials by providing security and ensuring mobility in and around WMD areas.

**Mission**

The mission of a CMWD task force is to secure the zone surrounding a potential WMD site to allow specialists to exploit the site for materials or intelligence. WMD sites are high-security assets of nation-states. Nation-states often hide their high-security research and military facilities to protect their assets. High-level reconnaissance assets of the United States and its allies have tens of thousands of potential sites around the world under surveillance. The CWMD forces’ main mission is to confirm or deny what reconnaissance assets report and to secure the potential WMD site until completion of exploitation, when a designated authority assumes responsibility for the site.

Currently more than 40 countries possess chemical, biological, radiological and/or nuclear (CBRN) capabilities. While many of these countries don’t want to use their current capabilities to engage in offensive operations, there is risk of the technology, information, and materials falling into the hands of rogue states or terrorist organizations.

The risk in unstable countries of the intentional or unintentional loss of WMDs is extremely high. These countries all possess varying levels of technology to maintain their stockpiles, but if a nation collapses, the risk to proliferation is high.

The facilities and sites in question generally vary in size, scope, and complexity. A site may be a basic chemical storage facility that has a primary responsibility of temporarily storing filled chemical munitions. In comparison, the Yongbyon Nuclear Scientific Research Center in North Korea spans nearly nine square kilometers and is comprised of roughly 390 buildings with about 15,000 workers. A large site such as Yongbyon may require simultaneous efforts of containment, isolation, clearing, and exploitation; this is a difficult process even during peacetime conditions.

Nation-states harden their critical facilities and use underground facilities (UGFs) to protect critical assets from observation or exploitation. UGFs such as the Punggye-ri Nuclear Test Facility in North Korea demand extensive mission planning and equipment not organic to many CWMD task forces. These complexities, combined with the lack of information on the locations, reinforce the need for units to train for many contingencies.

The sheer size of some of these facilities will require CWMD task forces to spend an extended period completing thorough exploitation. Units will need specific equipment and weapon systems to execute underground operations. For this reason, sustainment and a resupply plan for all classes of supply must be included during mission planning.

**Planning Considerations**

CWMD operations include special planning considerations for the battalion. These considerations include air assault operations, ground-movement operations, integration of specialized enablers, forward passage with coalition partners or U.S. forces, and the handoff of the site to a designated authority. All these planning considerations are significant factors for CWMD operations that could last several days to several months.

The most efficient means of quickly moving troops to the area is air movement via helicopter. The 101st Airborne Division’s (Air Assault) Gold Book aids in hasty air assault planning. The necessity of speed in operations is vital in moving critical assets around the battlefield.
The limited number of specialized enablers for CWMD operations makes the employment of these assets rapidly and efficiently crucial to mission success. That’s why air assault operations are preferred to enable the rapid confirmation or denial of CWMD sites. If reconnaissance assets arrive early, they can confirm or deny the presence of WMDs and save the task force from wasting valuable time on a dry hole.

Specialized enablers assigned to the CWMD task force enable the maneuver force to detect WMD rapidly and to determine courses of action for confirmed WMD. These enablers are:

- The hazard assessment platoon (HAP) is a reconnaissance asset used to identify WMD. This asset is one of the first to be employed on the site to confirm what maneuver forces may have already detected through ground reconnaissance. HAPs are task organized to chemical brigades in the U.S. Army.

- The tactical human intelligence team (THT) is a brigade-level asset assigned to assist the maneuver unit with tactical questioning of personnel at the objective. Many CWMD sites contain a myriad of scientists, security forces, civilian workers, and their associated families. A rapid tactical examination can render valuable intelligence to the maneuver force.

- The chemical response team (CRT) is an asset that provides systems and equipment to help render an objective safe and to conduct exploitation within a facility, making recommendations for courses of action about items found on the objective. The CRT is also a unit task organized within a chemical brigade.

Each one of these assets has specialized equipment and personnel factored into mission planning.

CWMD task forces must also be experts in forward passage-of-lines (FPOL) and rearward passage-of-lines operations. In most cases, the CWMD task force conducts FPOL through a coalition or U.S. unit as those units move the forward edge of the battle area. The units that make initial contact with these sites secure an outer cordon and request the CWMD task force to move forward to assume the inner cordon and execute exploitation operations. Units may work together for the first time as the CWMD task force arrives on site to conduct the initial assessment. CWMD task forces will work across unit boundaries and battlespace. This cross-boundary use of the CWMD task force adds to the complexities of clearance of fires, air corridors, and sustainment operations.

The planning assumption is that the operations will exceed 24-48 hours for a small facility. Larger sites may require 30 days or longer. Sustainment becomes an issue beyond what the initial air movement brings forward. The CWMD task force will secure and exploit facilities that are widely dispersed over the battlespace or in remote areas. The vast expanse of operations can require the CWMD task force to develop multiple mission-command nodes to maintain mission command with units on the ground and the various headquarters with which those units are aligned.

Training

During our battalion’s train-up for deployment to the RoK, we worked alongside the Asymmetric Warfare Group (AWG) to prepare for CWMD operations. Initial notification that we would assume the CWMD mission allowed only three months before the deployment to prepare for a mission that no one in our combined arms battalion knew how to do. With only a short amount of time to prepare for the mission, AWG was the only resource in the U.S. Army that allowed us to rapidly overcome our knowledge gap. AWG introduced us to the basics of CWMD planning, CWMD operations, and UGF operations. We worked in partnership with AWG throughout our brief train-up and during the deployment to the RoK.

AWG assisted the 1-16 Infantry companies in focusing their efforts on company- and platoon-level training. The interactions centered on planning considerations; tactics,
techniques and procedures (TTPs); communication; and recommended equipment. Before 1-16’s National Training Center (NTC) rotation, AWG conducted classroom instruction with teams, squads, platoon leaders, and company commanders. These classes and the associated training helped leaders across the battalion understand CWMD operations and how to train CWMD within the battalion.

During NTC Rotation 16-08, the battalion received all the specialized enablers and assistance from AWG to execute the rotational CWMD mission. The NTC rotation was the first time the battalion was able to work directly with all the specialized assets in a training environment. The battalion received HAP, CRT, THT, and a nuclear disarmament team (NDT) for the military decision-making process and mission execution. This experience helped the battalion tie theory to application, and it served as the pre-deployment culminating exercise.

The battalion took the after action review from NTC and directly applied it to its training glidepath for deployment to Korea. Training in the RoK started with a CBRN academy to train new members of the battalion and to certify leaders. Training then moved to the execution of two 2nd Infantry Division Warrior Strike exercises. These exercises helped refine 1-16’s TTPs and mission planning, combined air/ground operations, air assaults, operational decontamination, CBRN academies, and combined training with the RoK Army. Each training event included comprehensive enabler-integration training and coordination with the aviation brigade, the organic chemical battalion in Korea, the brigade’s organic dismounted engineers, and the RoK Army. This glidepath enabled our battalion to achieve success in all training objectives during the Warrior Strike exercises.

**Equipment**

The current modified table of organization and equipment (MTOE) of an armored brigade combat team has capability gaps that were identified during training in Korea. Throughout the leader training program, NTC rotation, and several CBRN academy training events, the AWG assisted in developing an operational needs statement (ONS) aimed at closing these gaps.

The current combined arms battalion MTOE does not support CWMD operations. To conduct the assigned air assault/CWMD operations, mechanized infantry companies require equipment and quantities more suitable to light infantry operations. Units will require enhancement of their mission-command systems with equipment such as Iridium Phones, PRC-150 manpacks, PRC-152s, and dismounted power amps. Platoon and smaller elements will need reachback capabilities with their higher headquarters while the battalion takes necessary steps to bring command-and-control systems forward.

UGF operations will require specific equipment to navigate/orient underground. This equipment includes M4 flashlights with pressure switches, night-observation device compasses, and underground communications equipment.

**Mission Command**

In CWMD operations, units move rapidly over long distances to multiple sites throughout various friendly forces’ battlespace. Multiple mission-command nodes and means of communication are necessary to support mission success. When passing information over long distances among different levels of command, there are several critical pieces of equipment that need to be present in the tactical command post (TAC) and the tactical operations center (TOC): satellite communication system; high-frequency radio system; Joint Capabilities Release, a software-enhanced version of Force XXI Battle Command Brigade-and-Below/Blue Force Tracking; and a Combined Operational Very Small Aperture Terminal Network-Korea Lite (COVN-K) that enables the tactical Combined Enterprise Regional Information Exchange in a small, more portable package. Given the terrain surrounding most of the templated WMD sites, any
wave-based communication system is an unreliable method beyond a clear line of sight.

All nodes must train to support dispersed mission command over rough terrain. As an air assault CWMD task force, we focused on developing our initial element with necessary staff members, enablers, and required equipment. This initial element acted as the TOC for the first identified objective. The remaining personnel established a TAC and waited on standby to conduct a ground movement to support the TOC or prepare for a subsequent air assault to a follow-on objective. The liaison officer (LNO) team serves as the initial link-up element with coalition or U.S. forces, and it facilitates the battalion’s FPOL.

**Conclusion**

Unless the United States and its allies can control and prevent the proliferation of WMDs, we face the stark possibility that these deadly weapons will be used in our lifetimes. We do not know where we will execute CWMD operations around the world, but that should not give us pause. It is not a question of if we will do CWMD operations — rather, it is a question of when.

Leaders should continue to exercise their systems to execute CWMD operations with their current forces and equipment. They should also continue to refine equipment requests to bring CWMD task forces to a higher level of readiness. Units must remain ready to do their part in enabling strategic assets to execute their assigned missions. If we fail to do our mission, we risk the dystopian “sticks and stones” future forewarned by Albert Einstein. (“I know not with what weapons World War III will be fought, but World War IV will be fought with sticks and stones.”)

**Notes**


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**Soldiers from 1st Battalion, 16th Infantry Regiment, 1st Armored Brigade Combat Team, 1st Infantry Division, prepare to conduct an attack on simulated enemy forces during an exercise at the Rodriguez Live-Fire Complex in the Republic of Korea on 16 February 2017.**

Photo by CPT Jonathan Camire
The Subterranean Combined Arms Fight: A Primer

CPT MICHAEL DUFFY

The subterranean fight is one that has affected Soldiers since early warfare. Caves were used as hiding places. Tunnels were frequently dug under medieval castles to try and bring down walls ("sapping"), leading to counter-tunneling operations and underground fighting. Indeed, this is where the term "sappers" originated. Tunnels were frequent hiding places and hospitals during the Civil War, most notably during the siege of Vicksburg. Miners dug them during sieges, most notably during the Battle of the Crater during the Petersburg Campaign. World War I brought tunneling to the Western Front as opposing armies attempted to burrow under each other’s trenches. British attempts to blow up German defensive positions during the Somme campaign utilized these tunnels. As the Germans began countering these actions through their own tunnels, frantic, close-quarters fighting erupted when two opposing tunnels converged. During the World War II battles of Berlin and Stalingrad, there was heavy fighting below ground and in subway tunnels. German Soldiers took advantage of the subway system to appear in areas U.S. forces had cleared during the battle of Aachen. Soldiers and Marines encountered intricate Japanese underground defenses all across the Pacific campaign. Veterans of Vietnam recall stories of underground complexes which Infantrymen had to go into and clear. Recent campaigns in Iraq and Afghanistan also had instances of underground warfare, both against the Taliban in multiple provinces and in insurgent attacks on coalition bases. Despite subterranean warfare appearing as a constant in war, the U.S. Army has only recently attempted to create the doctrine to address this type of fighting.

Organizing for the subterranean fight is much like organizing for an air assault. The smallest level organization that will lead the task force is the battalion. The smallest level that should execute is the company. Although at first glance it may seem that the underground battlefield is solely an infantry fight, as traditional combined arms do not appear to be able to support with lethal effects, subterranean operations require a combined arms task force as much as any other operation. Engineers are vital for the breaching equipment they bring and for the expertise they have in analyzing structures. Chemical Soldiers are needed for their use of sensors that can detect air quality and for anything else that might taint...
Security is the most important principle of patrolling and is the first step in the underground fight. Once the underground facility (UGF) is identified, an outer security cordon must be established to prevent the enemy from interfering with the clearance operation. The forces conducting the clearing operation will have enough of a fight; they do not need to worry about enemy reinforcements coming from above the surface. Next, an inner security cordon must be established. This should encompass as much of the facility’s entrances and exits (referred to as portals in doctrine) as possible. A good way to do this is to conduct an above-ground clearing mission to identify not only all portals in the area but also any ventilation shafts, generators, antennas, cameras, etc., (known as “umbilicals”) that might connect to the UGF. The locations of any of the umbilicals found need to be shared on the unit’s common operating picture. All portals found likewise need to be shared and secured. Umbilicals and portals give the unit the beginnings of a blueprint of how the UGF is designed.

Umbilicals can also allow the task force to shape the battlefield through cutting power, turning off ventilation, or isolating the UGF from its command and control elements. Depending on the operating environment and time available, the task force may begin to shape the fight before any forces enter the UGF. Turning off the power supply to the UGF can make conditions unbearable for the defender. Lack of air conditioning or heating can quickly make the defender uncomfortable, while powering off lighting can create feelings of claustrophobia and panic for the defender. The UGF may lose the ability to generate fresh water if electricity powers pumping or distilling equipment. Turning off ventilation may force the defender to make the decision of either surrendering or suffocating as breathable air is slowly replaced with carbon dioxide. At the very least, disabling surveillance equipment allows the task force to reduce the enemy’s situational awareness.

With the surface secure, the task force can begin preparing to send forces into the UGF. One portal needs to be the designated master portal and is the main point of entrance and exit for the subsurface force. The subsurface force will need to establish a command post (CP) at this portal that allows the tracking of all Soldiers who are in the UGF. A good technique is the use of a hook and pile taped board and name tapes. As the Soldiers go into the facility, they hand off their name tapes and are tracked by a radio-telephone operator (RTO) on the board. The company first sergeant and the executive officer (XO) are also at the CP. The first sergeant oversees the casualty collection point, decontamination point (if needed), recovery operations, and accountability from this point. The XO controls overall operations from the surface. He communicates with higher, works with an RTO to update the surface version of the UGF map, and positions in such a way to relay radio signals from inside the tunnel. The commander should go where the majority of the company’s combat power resides. If the majority of the company is in the tunnel, the commander should go into the tunnel as well. This will allow the commander to more...
rapidly make decisions at the point of friction and will help alleviate the breakdown in radio communications that can occur with subterranean fights.

Platoons will need to task organize to best address the nature of the subterranean fight. Communications will quickly become degraded. Casualty evacuation (CASEVAC) becomes a difficult task, as teams will need to carry casualties long distances with little vehicle support and possibly up and down multiple stories. Automatic weapons fire deafens surrounding Soldiers and fouls the air. M240 gunners and antiarmor specialists can be task organized to fill other roles. Key positions to fill include aid and litter teams, runners, FM relay teams, and fire teams. Squads will quickly become jumbled up in the UGF so teams need to be cross-trained to work with others in the platoon. In order to maintain tempo and initiative, every Soldier must be able to fill any position in the fire team. The more time platoons take to reorganize in the UGF, the more opportunities the enemy has to counterattack or to win back the initiative.

The company must also task organize for some of these same issues in order to address the aforementioned challenges. The task force must be prepared for contingency plans along all warfighting functions. For example, the commander must have a good number of runners available at all time. At least four is recommended, as these will allow the commander to rapidly send messages to underground elements and the surface elements in the case that radio communications fail. Additionally, the commander may want to create retransmission teams to leave at key locations in the UGF to facilitate radio communications with the surface. CASEVAC teams at the company level will need to consider moving Soldiers in gear through long passageways and potentially up and down ladders and stairs.

Platoons and higher also need to have designated mapping personnel. These Soldiers’ sole job in the tunnels is to try and build a common operating picture to facilitate command and control in the UGF. This is a difficult task as UGFs do not have the typical reference points many Soldiers use to navigate by. Soldiers chosen to map the UGF will need a good ability to accurately measure distance and will need compasses and a good sense of direction. These Soldiers will draw out scale pictures of the UGF and name corridors, intersections, rooms, and portals in accordance with the unit’s standing operating procedure (SOP). Engineers from the brigade’s engineer support company have specialty equipment that will aid them in this task. If engineers are unavailable to map, units should have Soldiers identified and trained to assume this role. Platoon mappers will pass on their maps either via runners or face-to-face contact with the company’s mappers and the surface CP.

The underground clearance team needs to incorporate Chemical Corps Soldiers as part of the combined arms team. These Soldiers have the training and equipment to test air quality of the UGF. Inhabited UGFs will quickly become breeding grounds for vermin, bacteria, and other vectors and pathogens. Additionally, many UGFs around the world are built to protect resources from U.S. air power. These facilities may include chemical, biological, radiological and nuclear (CBRN) development centers. Chemical Corps Soldiers will be able to test for the presence of CBRN in the UGF. They may also, with the proper equipment, be able to test for breathability of air and aid commanders in determining the protective equipment Soldiers will need before entering UGFs.

UGFs will use a lot of manpower quickly. Massive facilities can culminate with a battalion and still need additional forces. Likewise, it is easy to get lost inside the facility and clear areas that have already been cleared or to double back into friendly forces. Intersections will need to be guarded and can severely degrade combat strength through security requirements on uncleared rooms and corridors. SOPs and senior leaders can help alleviate this pressure. Unit SOPs need to determine how cleared rooms will be marked. This is standard infantry practice. However, care needs to be
taken to ensure there are enough marking devices on hand for large facilities and that they will work in both white light and no light conditions. Chemlights are perfect for this. For example, green can signify clear rooms and cleared portions of corridors; red can be for dangerous areas; and blue can mark casualty collection points. Whichever method is used, markings must be used at regular intervals in corridors, as they will aid in moving through the UGF.

Marking cleared rooms and intersections also provides an additional means of navigating tunnels and allows units to rapidly exfiltrate the facility if needed. There are a variety of reasons a unit may need to withdraw from the UGF. Air quality may become so poor as to be dangerous to Soldiers. The UGF might become so weakened by explosions that the structural integrity becomes compromised and it begins to break down. Whatever the reason, there must be a battle drill in place to ensure all Soldiers leave the UGF and are accounted for. This drill needs to be initiated with a single proword that is passed through radio communications, runners, and through verbal relay. Upon receipt of the proword, Soldiers repeat the proword and begin a controlled, rapid withdrawal out of the UGF. Security is still paramount. The furthest Soldiers into the UGF begin moving back towards the master portal, collecting the security elements as they fall back. The biggest friction point for an evacuation drill is accountability. As units rapidly withdraw from the UGF, there is the possibility that someone will be left behind. Once the Soldiers on the clearance force exit the master portal, they need to enter a designated holding area until they can file through the control point run by the company RTO. In the event that someone is left behind in the UGF, a properly equipped rescue team needs to be prepared to enter the UGF to attempt rescue.
Another challenge is preventing a unit’s Soldiers from doubling back into themselves and creating an increased risk of fratricide. This is done in multiple ways. First, SOPs stating the clearance procedures ensure everyone is going in the same direction. For example, when coming across a T intersection, how does the unit ensure that it knows exactly how to go?

The next way to prevent fratricide is through the use of a continuously updated common operating picture. It needs to be a regular occurrence where platoons and above send their runners with updated maps to their next higher element. In this way, the units are able to show where they have Soldiers and are able to pass on more of an idea of what is inside the UGF. This way follow-on forces know where friendly forces are ahead of them before they go into the tunnel. It also helps prevent units from doubling back into themselves if they encounter a UGF that has corridors that turn back towards itself such as circular corridors or facilities.

Finally, fratricide prevention must take portals into account. The master portal should be the only entrance and exit point for friendly forces. All other portals will have security on them from the surface. This is to ensure that no forces leave the UGF without their higher headquarters having accountability of them and will help prevent the subterranean clearing force from taking the inner cordon by surprise, appearing suddenly out of a portal. There will be times when additional portals need to be opened, such as for CASEVAC purposes or to bring in equipment or personnel, but this needs to be tightly controlled and heavily coordinated. Communications between the subterranean clearing force and the inner cordon will likely be nonexistent except through the surface CP. Ideally, all friendly forces moving in and out of the UGF will use the master portal. If this is not possible, the task force commander needs to tightly control the use of additional portals.

Breaching will be a common task, especially in specially designed UGFs. Avoid breaching until as much of the facility as possible is cleared since the explosions can weaken the UGF. This may cause portions to break apart, endangering friendly forces. Explosives also foul the air, deteriorating the air quality and potentially creating inaccessible areas. Mitigate air fouling by first checking to see if doors are unlocked before attempting mechanical breaching, thermal breaching, and finally, explosive breaching. Explosives need to be handled with caution; the shock wave through the UGF can concuss friendly forces, damage the overall structure, and potentially cause a variety of other effects. Sappers are a vital part of the underground clearing team. Not only are they equipped with a wide variety of breaching assets, but they can also detect and neutralize booby traps and mines. Sappers will help mitigate the risks of explosives by analyzing the UGF and using the minimum amount required to breach doors.

Extra equipment is desirable in the subterranean fight but not necessary. Ballistic shields and specialty radios will help the clearing force but are not go/no-go criteria. A well-rehearsed force that practices the fundamentals of room clearing and understands the limitations of its organic equipment inside an UGF will be able to win any subterranean fight it encounters.

With the increasing urbanization of the world, subterranean fights will become more and more common. Most recently, the Battle of Mosul demonstrated that a determined foe will use this domain to their advantage. Few units were prepared for that type of fighting. The U.S. Army needs to prepare to fight and win underground. Rehearsing for an urban environment and understanding the specialized environment will allow units to do this.

Soldiers assigned to the 5th Battalion, 20th Infantry Regiment clear an enemy tunnel complex during NTC Rotation 18-06 on 15 April 2018.

Photo by SPC Daniel Parrott

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The OSUT Platoon Leader Experience

2LT DAVID RICHARDS

I was a few weeks away from conducting my permanent change of station (PCS) move out of the Infantry Basic Officer Leader Course (IBOLC) at Fort Benning, GA, when the 2nd Battalion, 11th Infantry Regiment team notified us about the opportunity to serve as One Station Unit Training (OSUT) platoon leaders. My initial reactions were the same as everyone else’s: negative. I came across an Army Times article articulating the reasoning behind integrating platoon leaders into OSUT. While my opinion of this assignment was not dramatically changed, the article did pique my interest and curiosity about the role of a platoon leader in the OSUT environment. After some consideration, I decided I couldn’t pass up this unique opportunity to shape a new duty position in the Army.

Initial Reactions

One of the most frustrating aspects of becoming a platoon leader at OSUT was trying to discern rumor from fact. From the start, Human Resources Command notified our IBOLC class that some of us would be “voluntold” to come to the 198th Infantry Brigade. Fellow lieutenants barraged us daily with a new set of rumors. Some of the most common rumors were also the most concerning: “Basic training is a mess.” “All you will do every day is sit in an office as a glorified assistant S3 and do paperwork.” “You will not get nearly as much tactical experience or deployments as your peers.” In my experiences here as a platoon leader, I have found that these rumors are embellished, biased, or just plain untrue.

Throughout the Army, there seems to be a perception that OSUT units are generally a mess and should be avoided by all means necessary. I have found the drill sergeants I work alongside every day are distinguished Soldiers and professionals. They show care, dignity, and respect to our trainees. Everyone on Sand Hill understands the importance of building the world’s best Infantrymen and takes that charge with the utmost seriousness and diligence.

Daily Operations

I found the rumors of being stuck in the office all day were not particularly concerning. I was still hesitant about my new position because I wanted to get in front of a formation to lead Soldiers and knew I could not do that from behind a desk. At first, my role as a leader was to establish a presence with my platoon. Standing guidance for OSUT platoon leaders is to lead from the front in every event. The intent is to provide the trainees exposure to platoon leaders to mirror the line and better prepare them for their first duty station. If they were at a range all day in the sun, so was I. If they were bivouacking in the field overnight, I was in the center of the patrol base. If my platoon was performing corrective action for failing a task, I joined in every repetition. Although I do spend a fair amount of time fulfilling administrative tasks in the office, I know from my peers on the line that I do not spend more time behind my desk than they do. Many lieutenants coming out of BOLC fail to understand that a large part of being an officer is administration, planning, and coordination. My time here has helped me gain familiarity and competence in many tasks that platoon leaders come to the line not knowing. Outside of the expected time spent completing routine administrative tasks, I spend more time in the field executing individual and small-unit collective tasks than most of my U.S. Army Forces Command (FORSCOM) peers. Nine total weeks out of the 22-week cycle consist of live-fire training: qualification ranges, team live-fire exercises, and live urban operations. In a calendar year, I will spend a total of 18 weeks executing live-fire ranges and another 10 weeks conducting Infantry training in the field. It is extremely rare to find that amount of dedicated field time on the line; the numbers speak for themselves.
Although I will not deploy with my current unit, this position has still afforded the opportunity to ensure I maintain operational readiness. At OSUT, we execute individual tasks and small-unit collective tasks six days a week for 22 weeks. The advantage of executing tasks at the team and squad level is that I can identify what right and wrong looks like when it comes to my squad leaders and team leaders. Most lieutenants go to the line without that perspective. In some cases, OSUT training has supplemented gaps in my officer training, such as throwing live hand grenades or utilizing the M320 grenade launcher.

Development

The relationship between the drill sergeants and platoon leaders is one of mentorship, teaching, and learning. The NCOs here come from a diverse background of experiences and duty stations. They understand that the OSUT platoon leader role is partially a role meant to prepare lieutenants for service in line units. They take this opportunity to develop me on a regular basis so that I don’t repeat mistakes their platoon leaders did, setting me up for success.

When I began my work here as a platoon leader, I stepped into my role with the attitude that I was a resource. I wanted to ensure I helped — not hindered — the organization. I took over numerous tasks that kept drill sergeants from coaching, teaching, and mentoring trainees. After learning as much about the organization as I could, I took over tasks in planning, personnel actions, and coordination for training.

By taking more resourcing and planning off their plates, drill sergeants were able to maximize time training Soldiers.

Maintaining this balance with my NCOs has been the most rewarding experience at OSUT. The differences between learning from my senior and junior drill is no different than the learning dynamic I would have on the line with my platoon sergeant and squad leaders. I believe the lessons my NCOs have imparted on me here will pay dividends on the line when I arrive to my unit more knowledgeable, confident, and competent in tactics than my fellow platoon leaders coming straight from IBOLC. The cadre here have consistently proven to be the most hardworking, dependable, and knowledgeable teachers one could find in a profession.

During my initial counselings, both my battalion commander and my company commander told me it was acceptable to “fail forward” and learn from my mistakes here. FORSCOM units can be understandably less forgiving because the risks and stakes are higher on the line. OSUT is an organization built to excellence because of past mistakes. Here I have the opportunity to learn from my failures and ensure I get tasks correct on the line. My command climate has provided me the confidence as a new leader to take on heavier workloads outside my daily duties. I have been assigned more important tasks, such as building an enhanced team live-fire range and have gained confidence in assuming and mitigating risk. This was instilled in me through continuous cycles of execution, assessment, and implementation of lessons learned to encourage constant improvement. I have gained operational

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198th Infantry Brigade OSUT Platoon Leader Preparation Model

**Platoon Leader Training**

- **BDE LVL TNG**
  - First 30 days
  - 198th BDE Newcomer’s Brief
  - Cadre Training Course (CTC) certification – TR350-6, 22-week POI Overview, Risk Management, Brave and Bold Standards, Gender Integration Standards, PL's Do's and Don'ts standards

- **BN LVL TNG**
  - NLT 90 days
  - Initial Counseling w/ BN CDR
  - BN Newcomer's Brief
  - RSO/OIC Course
  - Military Licensing/348
  - 8-step training model LFX certification w/ DRAW
  - Risk management training
  - PL-focused leader development

- **CO LVL TNG**
  - First 60 days
  - Conduct APFT/ACFT
  - Administrative Tasks completed within 14 days (GAT, 350-1, MEDPROS)
  - Supporting Agency Tour (TADSS, Range Control, MTAC, Winder Clinic, DFAC)
  - Review TR 350-6, Brave &Bold Standards, POI/Lesson Plans

**Platoon Leader Opportunities**
- Lead a 60-Soldier platoon from civilian to Infantry Soldier
- Build relationships and gain experience from Senior NCO’s
- Multiple training reps at individual/small-unit collective level
- Tactical & administrative officer professional development

**Trained Platoon Leader**
At 12-month mark, PCS to tactical unit of assignment

**Platoon Leader Incentives**
- Ranger School
- Airborne School
- Earn the EIB
- Basic Combatives Certification
- Stryker Leader Course
- Mechanized Leader Course

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flexibility and now push boundaries to better gauge my own limits and the limits of my formation, so when I get to the line I will be a bolder, more aggressive leader than my peers.

Closing Remarks

Although rumors still persist, I believe being an OSUT platoon leader is an unbelievably beneficial opportunity. With our proximity to the Infantry School and Maneuver Center of Excellence, being a member of the cadre presents me with the opportunity to get after many schools and programs to augment my skills as an individual Soldier. Here, I have the opportunity to return to Ranger School, as well as the opportunity to earn my Expert Infantryman Badge. I even have rare opportunities to attend additional schools like Airborne or Air Assault School. From a career perspective, my position has put me in contact with fellow branch-detailed officers who offer great networking opportunities. Most officers within my battalion, to include my company commander and the battalion commander, are proactive about developing me for success in future careers. (See Figure 1 for the 198th Infantry Brigade OSUT platoon leader preparation model.) For a second lieutenant relatively brand new to the Army, this community has proven to be a bank of knowledge that will make a pivotal difference in my career. Despite the rumors that circulated about this assignment, I have found that being an OSUT platoon leader is one of the best decisions I’ve made as a leader and a Soldier.

Notes


2LT David Richards is currently serving as a platoon leader in Fox Company, 2nd Battalion, 54th Infantry Battalion, 198th Infantry Brigade.

Courage:
Why Fostering Relationships Today Is Critical for Tomorrow

MAJ GEORGE J. FUST

The C-130 banks hard to the left and then levels out. The barren landscape races beneath its grey hulk. Moments later the sky is filled with paratroopers. These men are “Sky Soldiers;” they come from a proud lineage of airborne Infantrymen who made their mark fighting in battles from World War II’s Pacific Theater to Vietnam to present-day Afghanistan. The paratroopers of the 2nd Battalion, 503rd Infantry Battalion (The Rock), 173rd Airborne Brigade, do not know the meaning of “cannot.” They are Soldiers of action who take on the toughest assignments in the most remote locations on earth. On this day, they find themselves conducting an airborne operation in the African country of Cameroon.

Their task is to partner with the Cameroonian army and its recently established airborne infantry battalion in order to facilitate multi-national operations. Merely conducting a link-up would have been cause enough to define success. Sky Soldiers never just meet the standard and that is why on a warm spring afternoon they find themselves falling from the sky.

For decades the American flag has graced the right shoulder of Soldiers serving overseas. At the ground level, it is partnership at its best. The exchange of mementos is as frequent as ideas. Shared understanding and mutual respect can only be attained through joint hardship and execution. Sky Soldiers are no stranger to this idea and have embraced the Army’s culture of partnership.

Cameroonian paratroopers may not speak English as a primary language, but they do speak another universal language — that of courage. The battle-hardened veterans of both countries have found common ground in the notion Paratroopers from the 173rd Airborne Brigade jump into Koutaba, Cameroon, alongside Cameroonian paratroopers on 15 March 2014 as part of Exercise Central Accord 14. Photo by MAJ Michael Weisman.
of strength under fire. The willingness to push through pain and the journey of continual self-improvement is respected by both groups from vastly different backgrounds.

Nowhere is this more evident than in the predawn hours along a well-worn trail. Before the sun rises over the central highlands, eager men from multiple nations knock the morning dew off their running shoes. They stretch the sleep from their lean bodies and prepare for the challenge that awaits. No words are spoken. Only the movements required to prepare are made. Somewhere in the distance a rooster breaks the silence of the savannah and as if on cue the men begin their run.

One group runs largely because it is required. The other group knows no other way of life. An outsider might think the groups are homogenous with a single nation.

Running has the unique ability to transcend cultural and ethnic differences. As the paratroopers beat a steady course across the open plateau, they are greeted by the occasional ancient village or stray goat. They continue their movement in silence. This act requires no communication for understanding. All involved understand why they run. They share the warmth of the sun that just broke across the horizon. They feel the unevenness of the water-formed trail beneath their feet. Alone with their thoughts but united as a brotherhood they continue. They all know the pride of their country is at stake, for each man judges the other.

It is not an adversarial judgment but one that has been formed over years of training and fighting. Weakness is easy to spot and must be dealt with for the good of this group. Their competitive spirit and demanding intolerance of defeat pushes them onward. As the world around them begins to wake from the stupor of night, the men are greeted not with “bon jour” or “hall-o” but instead they hear “coo-raj.”

The term is universally stated by the young and old and continues to carry the men towards their end. Simply put, the French word means courage. It is doubtful that anything could motivate this group more.

As they near their destination the pace quickens, and the sound of labored breathing now accompanies the soft patter of moving feet. For Cameroonian and American alike the morning run was more than an aerobic exercise. It was a moment of quiet solitude — a break from the chaos that is never far from them. It allows each man the opportunity for self-reflection and personal growth. The finish line for this group is actually their start point. Having run together they have broken the barriers to mutual understanding and have forged a bond. Having never said a word, they have said a great deal. It is courage that brought them together. Courage that allows them to fall from the sky. Courage that will enable them to endure hardship to ensure the prosperity of others. Let courage forever ring in their collective minds. For with it, nothing can stop them.

The above vignette demonstrates interactions that occur around the world daily. It is imperative that Soldiers who travel abroad understand their role in developing strategic partnerships. The United States must leverage its allies and partners to defeat or deter adversaries. Rhetoric can never replicate or strengthen an alliance or partnership as much as two soldiers from different countries working together. Every personal interaction should be viewed as an opportunity to build confidence and establish trust. These relationships will be critical in the opening stages of future conflict when time or conditions prevent team-building exercises.

From rotations in Eastern Europe, security force assistance missions in Africa, and patrols along the DMZ in the Republic of Korea, the occasions to represent the United States’ values and capabilities are available. Given the frequent rotation of service members to these locations and others, units must prioritize building relationships and bridging cultural gaps. Technical deficiencies can be overcome with technical solutions. Trust must be earned. It must be continually reaffirmed. But once it is forged, it can serve as a powerful deterrent.

Our adversaries know U.S. Soldiers can run fast. They know other nations are also capable. They will attempt to breed resentment and competition because they fear facing a united front. At the individual level, every Soldier must have the courage to place collective security above their own needs. Allies and partners must believe the group will run together. That one will not leave the other behind. Let courage be the rallying cry for those who believe in a liberal world order. Let each of us have the courage to fight for a cause larger than ourselves. Courage is only the beginning, and yet, it is also the end.

MAJ George Fust is a military intelligence officer who currently teaches American politics and civil-military relations in the Social Science Department at the U.S. Military Academy at West Point, NY. He holds a master’s degree in political science from Duke University. He has operational experience in Africa, Europe, and the Middle East. He previously served in the 173rd Airborne Brigade, the 207th Military Intelligence Brigade, and the 1st Infantry Division.
Training Notes

Section Gunnery and ABCT Lethality

1LT ZACHARY J. MATSON

“Close combat, man to man, is plainly to be regarded as the real basis of combat.” — Carl von Clausewitz

The U.S. Army continues to prepare for large-scale combat operations (LSCO) through tough, realistic training against a near-peer threat. The bulk of America’s conventional striking power — its armored brigade combat teams (ABCTs) — may struggle to maintain qualified and lethal sections due to high personnel changeover and the deliberate neglect of section gunnery. While Human Resources Command (HRC) and Headquarters, Department of the Army (HQDA) control the former, brigade commanders have control over the latter. Choosing to neglect section gunnery generates three distinct problems:

- Section leaders never receive feedback and development on a live-fire exercise that bears more importance than any other like exercise;
- Battalion commanders reluctantly separate platoons into sections which reduces flexibility in planning; and
- Company commanders and platoon leaders do not have any validation or confidence in their sections’ operational autonomy before separating them for survivability on a dispersed 21st century battlefield.

While brigade and battalion commanders might see platoon Table VI as an opportunity to train both platoons and sections, the truth is this approach does not accomplish the best training or preparation for LSCO.

The Army places special trust and high expectations in its infantry staff sergeants — mid-career NCOs responsible for training the foundation of the decisive force. What matters for promotion to sergeant first class, however, is rated time as a rifle squad leader, not as a section leader.\footnote{Sydney J. Freedburg Jr., “Miserable, Disobedient, and Victorious: GEN Milley’s Future U.S. Soldier,” Breaking Defense, 5 October 2016, accessed from https://breakingdefense.com/2016/10/miserable-disobedient-victorious-gen-milleys-future-us-soldier/} Infantry NCOs assigned to an ABCT must rotate through the rifle squads to accumulate rated time, but the lethality of a rifle squad pales in comparison to that of a Bradley section. Understandably, this priority of rated time creates a desire in NCOs to serve in the rifle squad leader role that is mandatory for promotion. In addition to this discrepancy in rated time between a section and a squad, the rifle squad leader is sure to get multiple repetitions in a squad live-fire exercise (LFX), while a section leader will not be rated as objectively during platoon LFX because this is the platoon’s evaluation with the platoon leader and platoon sergeant responsible for the results. More often than not, platoon leaders and sergeants maneuver their sections, with the section leader resigned simply to the role of track commander during platoon Table VI. Comparatively, a squad LFX gives a squad leader the chance to formulate a plan, brief it, execute it, and receive feedback for development, all while incorporating enablers, under stress, and with live rounds — truly an important exercise for leader development. Section leaders do not get the same opportunity because they are never offered the ownership of a section LFX. Section gunnery and NCO development go hand in hand. Field grade leaders who fail to schedule this event deny a portion of their formation invaluable training. Unfortunately, many ABCTs choose this route.\footnote{1 LTG Michel D. Lundy, “Meeting the Challenge of Large-Scale Combat Operations Today and Tomorrow,” Military Review, September-October 2018.}

Leader development is even more vital as formations on the battlefield of the future are expected to perform while geographically dispersed. GEN Mark Milley, who served as the 39th Chief of Staff of the Army (CSA), described the future battlefield as requiring never-before-seen levels of unit dispersion. “Soldiers… must split into small units and stay either on the move or under cover,” warned the CSA.\footnote{2 Training Circular (TC) 3-20.0, Integrated Weapons Training Strategy (IWTS), June 2019.} Mechanized rifle platoons will break up into sections to increase survivability on a modern battlefield; however, sections never train or operate independently in current unit training plans. Occasionally, a commander detaches a section from its platoon during Combat Training Center (CTC) rotations, but without the deliberate planning and use of live rounds, section leaders do not benefit from this simulated training, as valuable as it is. The Army knows it will fight dispersed, so it is a commander’s responsibility to train those echelons and leaders with live rounds and incorporate that into our peacetime training calendars. Section Table VI qualification allows the battalion commander the flexibility to operate as either sections or platoons.\footnote{3 Infantry (CMF 11) Career Progression Plan, Office, Chief of Infantry, Fort Benning, GA.} Sections will be the smallest unit we see in a mechanized formation on the future battlefield, and preparation begins now to dominate in close combat.

Section gunnery, so often missing in ABCT training calendars, provides an important mechanism to make these formations lethal. By planning, resourcing, and executing section gunnery, commanders provide their formations with more seasoned and capable NCOs who take their evaluation and performance more seriously. Successful completion of section Table VI provides battalion commanders with qualified sections that can both operate independently and survive on the future battlefield. Training at this echelon makes ABCTs more lethal and fulfills the promise of leader development that we as an Army focus on. It requires more time and effort, but the increased lethality and leader competence ensures mechanized formations — at any echelon — can fight and win tomorrow’s wars.

\section*{Notes}
\begin{itemize}
\item \footnote{3 Infantry (CMF 11) Career Progression Plan, Office, Chief of Infantry, Fort Benning, GA.} Infantry (CMF 11) Career Progression Plan, Office, Chief of Infantry, Fort Benning, GA.
\item Through various interviews the author has had with peers who have served in the 1st Infantry Division, 1st Cavalry Division, and 3rd Infantry Division.
\end{itemize}

\textbf{CALL Releases New Publications}

\textbf{Handbook 20-05 — Commander and Staff Guide to Liaison Functions}
Liaison officer (LNO) functions are critical to the successful integration of diverse capabilities across military and civilian domains.

\textbf{GTA 07-01-006 — Grenadier Guide}
This graphic training aid (GTA) provides technical information about combat techniques for the M320 grenade.

https://usacac.army.mil/organizations/mccoe/call/publications
The Changing Face of Rifle Qualification:

Best Practices to Succeed in a New Era

Individual weapon qualification has long been a staple of Army training. It serves as a method for commanders to gauge unit proficiency and training needs, allows for a certain degree of risk mitigation, and serves as a gate to allow individuals and units to progress to more advanced training. For years, the Army has used a three-position static record fire qualification to achieve these goals across the force. Though that course of fire allowed commanders to have a modicum of understanding of where their units stood in terms of the ability to hit a target from 50 to 300 meters, it did very little to enforce the skills needed to utilize the rifle in combat. Reacting to an immediate threat, reloading, using cover, and changing positions — skills needed to maximize individual Soldier lethality and survivability on the battlefield — were entirely absent from qualification. As a result, these skills were at best secondarily trained, and Soldiers qualified on their M4 carbines had to learn these key tasks in the crucible of ground combat.

On 30 July 2019, however, the qualification table fired by most Soldiers for at least the majority of their careers was replaced by a new course of fire under the auspices of the newly-minted TC 3-20.40, Training and Qualification, Individual Weapons. Built within the structure of the Integrated Weapons Training Strategy (IWTS), the new course of fire requires a shooter to have significantly greater weapon-handling skills, operate under the stress of a time constraint, and to take proper action without needing to be told. The standard for qualification has not changed, and marksmanship skill out to 300 meters is still tested at least as much as it was under the previous course of fire. The new course of fire will improve individual Soldier lethality by increasing the skill level needed to reach proficiency defined as qualification.

In order to prepare Soldiers to meet the challenge presented by the new qualification standard, leaders at all levels must begin to understand both the differences between the old and new courses of fire and the differences in the training path that will be required in order for Soldiers to achieve success and units to maintain readiness. Where in years past qualification was often thought of as little more than an administrative necessity in order to begin a live-fire training progression, it will now require time and energy allocated in the form of a deliberate training progression for Soldiers and units to be successful when qualifying with their primary weapon systems.

In late spring 2019, Bravo Company, 1st Battalion, 19th Infantry Regiment, became the first Infantry One Station Unit Training (OSUT) company at Fort Benning, GA, and one of the first companies across the Army, to conduct rifle qualification in accordance with the standards of TC 3-20.40. Adding barricade fire and forcing Soldiers to reload and change positions under the pressure of a time constraint, the new qualification table tested our ability to shape our training progression to provide the best training for our trainees and helped us to develop some “best practices” that facilitated an improvement from an average score of 15 out of 40 to an average score of 36 out of 40 from the time trainees fired...
their first practice qualification with iron sights to their final record qualification. Our experiences and recommendations will help your unit succeed in the future.

Our Experience

Infantry OSUT breaks up the program of instruction (POI) for rifle marksmanship (RM) into 18 distinct periods. RM one through seven focus on the very basics of RM, first introducing trainees to the M4 Carbine and then progressing through a scripted series of Engagement Skills Trainer (EST) and live-fire training events utilizing back-up iron sights (BUIS). The culminating event in this first portion of RM is a qualification table shot with BUIS. Afterwards, trainees are issued M68 Close Combat Optics (CCOs) and proceed through a nearly identical set of training gates utilizing their optical sighting systems before reaching record qualification on the all-important RM 18.

RM 7, the trainees’ first experience with a record fire qualification shot with open sights, is the point at which Bravo Company noticed a significant difference in the ability of trainees to achieve similar results to those achieved by previous classes shooting the “old” qualification table. Specifically, the class in question averaged a score of 15 hits on RM 7 during the cycle, while the class prior, shooting the legacy table, had averaged a score of 23. Was this class just filled with inferior marksmen across the board? Were our drill sergeants somehow missing the mark with their instruction to this class? Or was the new qualification that much more difficult than the legacy course of fire?

In watching trainees execute RM 7, one major problem became clear. Marksmanship, in its purest form, the ability to hit a target, was not lacking. The trainees were actually hitting targets at a high rate... when they actually managed to fire at the target at all. Unfortunately, they were missing the chance to fire at a significant portion of target exposures because their ability to manipulate their individual weapons had not sufficiently developed to that point. Though Soldiers still face 40 possible engagements on the new qualification table, their ability to achieve a high score is negated drastically if they are unable to reload, correct a malfunction, and/or change positions quickly enough to fire at their next target exposure. This is a reload wherein the weapon reaches bolt lock on an empty magazine, and retention of the empty magazine is of the essence, cover is unavailable, and/or the ability of the individual to put rounds downrange quickly is of greater importance to his or her survivability, lethality, or the success of the mission than immediate retention of an empty magazine. Introducing out trainees to this version of a reload greatly enhanced their ability to perform on the new qualification table, as they ceased wasting valuable time attempting to stow an empty magazine while laying exposed in the prone.

After identifying the problem, we realized that we had to make some immediate changes to our planned training progression in order to ensure our Soldiers were trained to standard and had the best opportunity to excel. First and foremost, we dissected the course of fire and prioritized where instruction was essential and where repetition and consistent rehearsal would be enough to improve skill level. We had to do our best to ensure that these young Soldiers, motivated as they were to improve, did not launch headlong into practicing bad habits. Drill sergeants went about re-teaching techniques for reloading, demonstrated and discussed possible ways to change positions, and encouraged trainees to experiment with shifting positions in order to find the ways that were most economical and comfortable for them individually. Slowly but surely we began to see improvements across the board.

While we allowed Soldiers to explore their abilities to find comfort and economy of motion in positional changes, we found that reloading presented a slightly different conundrum. Typically, a magazine change — or tactical reload — is the preferred method taught to Soldiers early in their careers. This method entails retaining the empty magazine once it is changed; it is generally performed when cover is available and can be utilized to allow safely changing of magazines in a slower, more controlled fashion. This method of changing magazines can also be used when the opportunity arises to exchange a partially used magazine with a full magazine prior to moving or doing anything that might require the maximum amount of rounds the weapon is capable of delivering. For example, a Soldier may perform a tactical reload at his or her last covered and concealed position before stacking on a door and entering a structure, or once a room is cleared prior to entering another room. Generally speaking, this method is best used when time is not at a premium and is best utilized in the latter sense mentioned above — in which the Soldier has not reached bolt lock and is preemptively changing magazines to avoid that situation.

As our trainees were losing significant amounts of time attempting to perform a tactical reload, we introduced them earlier than usual to the concept of an emergency reload. This is a reload wherein the weapon reaches bolt lock on an empty magazine, and retention of the empty magazine is, at best, secondary in priority to getting the weapon back in the fight. This reload is the preferred method when time is of the essence, cover is unavailable, and/or the ability of the individual to put rounds downrange quickly is of greater importance to his or her survivability, lethality, or the success of the mission than immediate retention of an empty magazine. Introducing our trainees to this version of a reload greatly enhanced their ability to perform on the new qualification table, as they ceased wasting valuable time attempting to stow an empty magazine while laying exposed in the prone.

After our company had spent time exploring different ways to shift positions and drilled emergency reloads to a point of relative proficiency, the trainees rehearsed the course of fire constantly. While the old qualification table required...
little if any rehearsal for success, this piece made the overall
difference for B Company as we approached our final record
qualification. During intermittent “downtime” both during
training events and in the company area, drill sergeants
timed and observed trainees rehearsing dry qualification
iterations from a set of standard barricades that remained
with the group throughout our rifle marksmanship period.
These rehearsals allowed trainees significant added time to
practice the skills they had been taught and gain vastly more
familiarity with the skills needed to accomplish the task at
hand.

B Company leadership also identified areas within the POI
where we might be able to make improvements that would
increase training value for the company. Under the current POI,
trainees technically still shoot an "Introduction to Barricades"
course of fire during RM 14, seven periods of instruction
after they shoot their first BUIS qualification table utilizing
barricades. With this in mind, B Company drill sergeants and
leadership planned and received approval for several minor
modifications to the courses of fire for RM periods 11-16. We
worked with range operations cadre to create a course of
fire consisting of target exposure frequency and duration that
modeled that seen on the qualification table for use when
trainees had finished confirming zero on LOMAH (location
of misses and hits) ranges, and we also added barricades
to courses of fire that traditionally introduced trainees to
single and multiple target exposures, moving targets, and
conducting immediate action on their weapons while in the
prone. This increased trainee familiarity with barricades
significantly and allowed them even more opportunities to
build proficiency leading to their record qualification.

When the dust cleared and B Company had completed RM
18 (the trainees’ record qualification), our average score had
improved from the aforementioned 15 we had begrudgingly
recorded at RM 7 to 35.99, with 68 percent of trainees (116
out of 170) achieving expert rating. Though our trainees
still had much to learn, they had come a very long way in a
short period of time. Their dedication to the task and ultimate
success led to an increased motivation that carried them
beyond the completion of their rifle marksmanship period and
helped them to achieve goals in subsequent portions of their
training path. It also became clear to them that obstacles that
seemed insurmountable just days before could be hurdled
successfully with the proper application of attention and
commitment.

Application to Your Formation

If you take one lesson away from reading this article, let it
be this: Build subject matter expertise within your formation. Doing
so not only benefits your formation in the near-term,
but if done in mass, it will increase capability across the
force. As an OSUT company, we were lucky to have two
drill sergeants who had graduated from Fort Benning’s
Marksmanship Master Trainer Course (MMTC). MMTC
is not designed to build the best shooters, although graduates
will shoot at a higher level when they return to your formation
than they did prior to attendance. The course does, however,
produce individuals with a great deal of skill in marksmanship
instruction, especially as it pertains to qualification and
training plan development in support of qualification goals.

If you are unable to send individuals to MMTC or cannot
send enough individuals, other options exist to build subject
matter experts (SMEs) within your formation at a faster
rate. MMTC can come to you in mobile training team (MTT)
format. The 75th Ranger Regiment and Army Marksmanship
Unit also have the ability to conduct mobile training for your
formation that will increase marksmanship capacity, building
canter shooters within your formation who will also be able to
assist in raising proficiency throughout. If you are located at
an installation that is also home station to a Special Forces
group, teams are often available to supplement your training
and bring with them Soldiers with special operations forces
(SOF) shooting course experience. Finally, civilian instructors,
many of whom have extensive experience from long military
careers, can be contracted to provide instruction directly to your
formation at command discretion. While not all options
provide instruction directly related to rifle qualification
itself, all will provide formations with an increased
understanding of marksmanship and, perhaps more
importantly, weapon-handling abilities that will translate
to performance on the new qualification table.

The second thing units should do to ensure success
is dry fire practice. There are only two aspects of
shooting that cannot be trained by dry firing: terminal
ballistics and recoil control. Every other aspect of the
shot process can be improved by consistent, deliberate
dry firing. Dry fire is absolutely free and can be done
without any resourcing; the possibilities for training
are limitless. Soldiers can practice everything from
basic sight alignment and trigger squeeze to magazine
changes, malfunction diagnosis and correction, and
shooting from different positions. Dry fire made the
difference for us, as trainees were able to experiment

A Soldier in training with Bravo Company, 1st Battalion, 19th Infantry
Regiment, changes firing positions.
with varying body positions, improve functionality of their kit or make adjustments to it, and improve reload speeds all while getting repetitions executing the fundamentals of the shot process.

In order to do this, however, commanders must develop systems within their organizations that not only allow weapons to come out of the arms room with great frequency, but force them to. Drawing weapons can be a cumbersome and difficult process — look for ways to streamline it and ensure Soldiers handle their weapons as close to daily as they possibly can. Dry fire is the most certain way to create proficiency quickly within a formation, especially when it comes to the weapon-handling requirements of the new qualification table. Because weapon handling has so much more significant a role than it has ever had in qualification, those skills must be built and committed to muscle memory perhaps even before a shot is fired.

Units should also consider kit setup as a vehicle to increasing potential for proficiency. Closed-top magazine pouches will severely hinder Soldiers’ ability to perform magazine changes quickly, and magazine pouch positioning can make or break the ability to reload quickly in certain positions. For instance, in the prone position, it is much slower to reload out of a closed-top pouch placed on the chest either on a fighting load carrier (FLC) or body armor than it is from an open-top magazine pouch worn on a Soldier’s belt. From a survivability standpoint, the Soldier will also expose less of himself to the enemy retrieving the magazine from his belt than he would be rolling onto his side to create the space needed to retrieve the chest-mounted magazine.

Units should resist the urge to ban personally purchased kit items, specifically magazine pouches and “battle belts.” They offer individuals significantly more options to arrange their kit to fit them and allow them the opportunity to perform at their best. Leaders must acquire a certain level of knowledge, however, so that they can ensure that Soldiers are using dependable equipment that will perform in training and combat. This is not to say that the new qualification requires Soldiers to purchase their own kit, but units will see that improved kits will beget improved scores, as Soldiers will waste less time fumbling with magazines and have more time to spend executing the shot process.

Finally, units must be willing to train as they fight. No, I do not mean train in body armor, helmet, and knee pads at all times. I mean that units must cultivate the mindset of training like their lives are on the line. Build barricades and use them in your company areas, but also learn to use them as if someone is actively engaging your position. Train magazine changes and immediate action whenever possible, and do so as if the only thing that stands between you and certain death is your ability to get your weapon back into the fight and engage the enemy. Utilize a shot timer to try to shave a quarter second off reload times across your formation. Train to make the slightest improvement which might make your formation — and the individuals within — that much more lethal and survivable.

Individual weapon qualification is changing, but the results you achieve as a formation do not have to atrophy as a result. The new rifle qualification table requires more of Soldiers and leaders alike, but we are more than capable to provide what it requires. Learn from our early experiences that produced excellent results. Build SMEs within your formation through any and every available training opportunity. Conduct dry-fire practice often in order to build, improve, and maintain skills. Seek out and welcome ergonomic improvements to kits that allow the possibility of realizing increased proficiency. Train every day to be a little better than you were the day before and be a split second faster on the gun than the enemy.

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SFC Jorge Sanchez is an 18B weapons sergeant currently assigned to 3rd Platoon, Baker Company, 1-19 IN, as a senior drill sergeant. He previously served with the 3rd Special Forces Group (Airborne). Additionally, he has multiple combat deployments to Iraq, Afghanistan, and most recently Africa.
Sniper. Throughout history the title has unnerved fighting men the world over. Soldiers learn to react to the threat, commanders plan in order to avoid them, and Infantrymen want to gain the requisite skill to be one. The U.S. Army has learned and relearned to select, train, and employ Snipers throughout history. Until the establishment of the U.S. Army Sniper Course (USASC) in 1987 by MAJ Willis Powell, snipers were always an afterthought. The utility that the sniper brings to a combatant commander was continually lost and rediscovered in every major U.S. conflict up to 1987. Once the USASC was established as an institution, it has become a source of continuing innovation, providing the Army the sniper it needs to meet the emerging threat of the day, from Cold War “Fulda Gap” scenarios, to Middle East interventions in the 1990s, to the counterinsurgency and stability operations of the 2000s. The modern sniper is a flexible intelligence collection and precision strike element, able to infiltrate forward of friendly lines and behind the enemies’ looking for command, control, communications, computing, and intelligence (C4I). The sniper is poised to enter the next fight and continues to perform in the current one when trained and properly employed.

The USASC continues to refine the program of instruction (POI) to prepare snipers for the modern fight. Without leaving behind the tenets of our fieldcraft, we are focusing more on relevance and interoperability. Snipers are often an afterthought in planning, preparation, execution, and assessment of operations. As the U.S. Army transitions its focus to large-scale combat operations (LSCO), sniper and reconnaissance elements are going to be needed more than ever.

Closing the Gap: USASC Refines POI to Better Prepare Snipers for Modern Fight

SSG JOHN SISK II, SSG CHRISTOPHER RANCE, SFC JOSHUA JONES, SGT CODY PERKINS, AND 1SG KEVIN SIPES
As the LSCO concept takes shape, the instructor-writers at the USASC are training the Army sniper to influence the next battle. The modern sniper is capable of fighting and surviving in a contested electromagnetic environment and employ multiple systems against an enemy working combined with infantry and cavalry reconnaissance. After training on identification and interdiction of electronic warfare (EW) systems, the teams can be used to disrupt any future adversaries’ ability to use electromagnetic fires on coalition forces. This example is the beginning of a whole new host of threats that the traditional sniper team and heavy sniper team may be employed against.

Given their inherent low-tech nature, the sniper is an extremely effective counter to enemy electromagnetic capabilities. Snipers can be employed in the contested electromagnetic environment where GPS-guided unmanned aerial vehicles (UAVs) fail to hunt for and neutralize adversary EW systems, and snipers can also minimize their own electromagnetic signature to avoid detection. Adhering to predetermined transmission windows, sniper teams can be employed prior to the departure of main body elements to find and destroy enemy EW elements with direct precision anti-materiel fires or indirect fires and then conduct a reconnaissance handover to the maneuver element, providing them accurate, timely, and reliable information on the objective.

If not being used as a direct strike asset against EW sites, the sniper team is inherently low-tech and if provided with the right equipment and clear mission objectives prior to crossing the line of departure (LD) will be able to conduct reliable reconnaissance and reporting while being agile enough to avoid detection. Snipers can conduct infiltration prior to the assault of dense urban terrain by Army brigades. Snipers can move in 48-72 hours prior to the brigade’s movement and begin disrupting enemy formations within the cities and identifying obstacles and bypasses. Working with the infantry and cavalry reconnaissance platoons, they can reduce the enemy’s picture of the battlefield by eliminating listening posts/observation posts (LP/OPs), dog teams, roving patrols, communications or retrans sites and teams, mortar firing points, and machine-gun teams; pinpointing enemy armor; and controlling close air support and artillery. Historically, a small number of snipers in dense urban terrain have shown the ability to fix and attrit both mounted and dismounted formations, most recently during the Ukraine-Russia conflict in Crimea. The level of detail provided by a well-trained sniper team in a reconnaissance role is extraordinary — from detailed written descriptions, panoramic sector sketches, traditional sector sketches, or photo reconnaissance. The sniper team can integrate into any level of reconnaissance organization in order to enhance that element’s capabilities whether it is utilizing optics and training in target detection, range estimation, and counter sniper operations to provide the best advice to the commander or provide precision overwatch and security to the element conducting the reconnaissance.

A common misconception is that the dismounted sniper team is ineffective against modern armor threats, or that a sniper is easily found and defeated by thermal optics-equipped armor. While it is true that current sniper weapons systems cannot penetrate certain armor, the current Army sniper has the ability to fix or neutralize enemy armor formations. Known sniper threats in an area of operations force the enemy to button up in armor and rely on their vehicle optics for situational awareness. Those vehicle optics themselves are vulnerable to sniper weapons system fire, particularly at the closer ranges found in dense urban terrain. Without the aid of their electronic sights, most main battle tank (MBT) main guns do not have the ballistic fire computers needed for long-range, accurate engagements, nor are the crews as well trained with the auxiliary sight. The MBT commander’s optics and weapons station are similarly vulnerable. Even next
generation machine learning target detection algorithms for armored weapons systems may be less effective on snipers. Snipers will continue to develop training to deal with current and future threats. Current operational snipers are being utilized in one- and two-man teams embedded at the company level or with special operations forces (SOF) elements. Night operations see the snipers moving quickly through the operating environment. Snipers are moving with assault elements and positioning in overwatch positions to cover movements. Average engagement distances are relatively close from seated or kneeling positions utilizing tripods. The majority of these missions are occurring at night. The need for clip-on thermal sights or upgrading the PVS-30 has been highlighted. Snipers’ ability to attain stability quickly, apply the shot process, and spot their own rounds during engagements is important. These snipers are operating as shooter/shooter teams. Due to the individual or team covering terrain so quickly, they do not take spotting scopes or extra equipment in order to set up and break down quickly.

Training should focus on:
- Rapid target engagement in limited visibility without a spotter
- Complex engagements (limited target presentations)
- Alternate shooting positions (fight up and fight down)
- Working snipers in as a control mechanism for movement
- Communication and reporting to maneuver elements

Daytime sniper employment trends are more conventional. Snipers are constructing final firing positions in an urban environment. The teams are still working in a shooter/shooter methodology with one sniper carrying the M2010 and the other carrying the M110 to allow for simultaneous shots or longer engagements. Depending on amount of time spent in sites, the teams work rest cycles with one on glass and the other resting until targets of opportunity or key targets are present. The average engagements during the day are between 300 and 1,350 meters. High-angle shots are playing a large role in engagements. Snipers are taking shots from low ground to goat paths on mountain ridges requiring high-angle adjustments.

Training should focus on:
- Quick high angle formula
- Wind formulas and calling wind for yourself without a spotter
- Fight up and fight down with and without a tripod
- Manipulation of equipment and attachments

The USASC continues to train the best snipers in the world. We are working to earn commanders’ respect and trust in the employment of snipers. Snipers are a true force multiplier and when utilized in conjunction with reconnaissance elements provide them with the best information for swift and decisive action.

SSG John Sisk II, SSG Christopher Rance, SFC Joshua Jones, and 1SG Kevin Sipes currently serve as instructors of the U.S. Army Sniper Course at Fort Benning, GA. SGT Cody Perkins is assigned to the 82nd Airborne Division, Fort Bragg, NC.
A marksmanship master trainer’s (MMT’s) duty is to plan, prepare, execute, and assess a unit’s direct-fire training and serve as the subject matter expert (SME) for all individual and crew-served weapons and systems within the unit. The MMT advises the commander on all aspects of direct-fire training, capabilities, tactics, and employment. The Army institutionally certifies MMTs for commanders that can serve at any echelon within the division to improve lethality.

The Marksmanship Master Trainer Course (MMTC) is a five-week course at Fort Benning, GA, that provides sergeants through sergeants first class with the E1 identifier. NCOs will master the Integrated Weapons Training Strategy (IWTS) for the rifle/carbine, pistol, M249 machine gun, Squad Designated Marksman Rifle (SDMR), and sniper weapon systems.

Training begins in the classroom where trainees are doctrinally trained on unit training plans, maintenance, preliminary marksmanship instruction, drills and positions, and execution of the Engagement Skills Trainer (EST) for the rifle/carbine and the M249. From the classroom, the trainees move onto live-fire ranges completing Tables IV, V, and VI of the IWTS culminating in the Army’s record fire and night-assisted fire with the PEQ-15. During this time, trainees work daily to master being a coach and become certified on building assistant instructors back at home station through drills and positions instruction assessments.

After successful completion of the IWTS, the trainees are instructed on the employment of the Army’s pistol, the M17. They again work through the IWTS on the pistol, certify on the Army’s pistol qualification, and then move on to the 25-meter range for common and complex engagements in urban rifle marksmanship. Trainees perform multiple drills and critical task evaluations with the rifle/carbine and pistol. Practical exercises on coaching another Soldier through the shot process and target analysis are also conducted.

Trainees then move into complex engagements with the rifle/carbine. Group, zero, and data collection with the rifle combat optic (RCO) and PAS-13 thermal optic from 100-600 meters, day and night, is conducted. Familiarization of the SDMR and Sig Tango 6 reticle is also conducted. Trainees gain confidence in the equipment, shot process, and employability, truly gaining an understanding of overmatch. Trainees are also tested on coaching a shooter, performing target analysis, and running a range.

The MMTC culminates with trainees pitching a unit training plan that they create to captains from the Maneuver Captains Career Course. NCOs must brief their plan in detail. Sniper weapon systems are also included in the unit training plan brief. Upon graduation, these NCOs are ready to go back to their company, battalion, brigade, or division and build training plans and certify other NCOs and Soldiers in marksmanship on all weapons platforms organic to a squad. MMTC graduates will also benefit from attending the Heavy Weapons Leader Course (HWLC) in order to gain mastery on all crew-served weapon platforms.

The MMT is an incredible asset to commanders. An MMT gives them true data on lethality within the formation, provides them with an SME that can improve performance, and an ability to ensure resources are not wasted. Outsourcing weapons training to contracting companies, civilian entities, or other units is no longer necessary. Commanders can build a bench of true professionals within their organization that can create and execute doctrinally based training and prepare for the next battle.
Total Force Warfighting: 
*Lessons from the Mexican-American War*

MAJ NATHAN A. JENNINGS

The U.S. Army has long operated under a Total Force concept where Active, Guard, and Reserve components bring distinctive contributions to Decisive Action and Unified Land Operations. While active force units usually possess the highest state of readiness, their reserve counterparts provide critical warfighting capabilities required to execute expeditionary operations. The National Guard, in particular, provides a significant proportion of the Army’s brigade combat teams to increase combat power for extended campaigns. The Reserve, on the other hand, maintains a large support structure that remains critical for enabling not only the Army, but the entire U.S. Joint force, to prosecute American interests.

Each of these components provides distinctive, and sometimes beneficially redundant, capabilities that senior commanders employ to create combined arms teams. Since the first integration of patriot militia with the Continental Army in the American Revolution, force tailoring has proven critical to unleashing the potential of the Total Force approach. As emphasized by GEN Mark Milley, the 39th Chief of Staff of the Army, the landpower institution “cannot conduct sustained land warfare without the Guard and the Reserve… It is impossible for the United States of America to go to war today without bringing Main Street without bringing Tennessee and Massachusetts and Colorado and California.”

This integral reliance on citizen-Soldier participation has proven a consistent theme throughout American history. Looking past the massive mobilizations of the First and Second World Wars, the Mexican-American War nearly a century earlier offers a compelling example where a modest U.S. Army active component relied heavily on volunteer units — in the form of federalized state regiments — to deploy and enable victory in an expeditionary theater. Similar to the kind of effort that would be required for any major campaign in the 21st century, thousands of citizens from nearly every American state marshalled between 1846 and 1848 to fight with the regulars south of the Rio Grande in order to defend their nation’s territorial interests.

Of all the places where Total Force cooperation achieved success in the seminal conflict, the Battle of Monterrey in northern Mexico, which occurred from 21-24 September 1846, remains notable for the degree of citizen-Soldier integration. Seeking to compel Mexico to concede American territorial claims, future president Zachary Taylor led a combined arms force of 6,000 Soldiers — which included two volunteer regiments of heavily armed Texas Mounted Rifles.
— in a campaign to capture the fortified provincial capital. Throughout the land invasion and the culminating assault, the general, and his subordinate commanders, combined the Texans’ specialized capabilities with the U.S. Infantry’s professional approach to attain a remarkable victory over a numerically superior Mexican army garrison.

**Total Force Integration**

The U.S. Army’s attack on Monterrey followed a 200-mile offensive into contested territory made possible by initial victories over Mexico’s Army of the North at Palo Alto and Resaca de la Palma along the Rio Grande. When Taylor finally arrived and surveyed the city on 19-20 September after an arduous march, he found it well-fortified and heavily defended. A garrison of 7,000 regulars and 3,000 militia under the command of General Pedro de Ampudia held three strongpoints that anchored a walled perimeter. In the east stood the fortified Bishop’s Palace on Independence Hill and two positions on Federacion Hill. In the north, directly in front of the American advance, stood a citadel called the Black Fort. The Santa Catarina River protected the city’s southern perimeter. Lieutenant Napoleon Dana of the 7th U.S. Infantry Regiment called the place a “second West Point in strength,” while artillery officer Abner Doubleday predicted that it “must be stormed at a heavy sacrifice.”

Taylor chose to envelop the city by dividing his forces into converging and integrated wings. The 1st Regiment, Texas Mounted Rifles would support Brigadier General William Worth’s infantry division in a circuitous attack against the enemy’s rear from the southwest, while the 2nd Regiment, Texas Mounted Rifles would support Brigadier General David Twiggs’s infantry division against the enemy’s extreme right from the north. In a hazardous strategy, Taylor intended Twiggs to fix the defenders on one side while Worth penetrated and seized the city plaza from the other. Doubleday, riding with Worth, worried that “in case of defeat the disaster would be overwhelming” as they “ran the risk of being sacrificed” in detail.

**Total Force Cooperation**

Worth initiated his circuitous attack on the afternoon of 20 September with the 1st Texas Rifles, as his most mobile element, riding ahead of the 5th, 7th, and 8th U.S. Infantry Regiments. As the only Soldiers in the world at this time wielding revolving Colt pistols, in addition to their famed precision Kentucky Rifles, the Lone Star volunteers boasted an unprecedented degree of close-combat lethality. In contrast, the rest of the combatants on both sides fought with single-shot, muzzle-loading muskets and various blades. Texas Revolution veteran Walter P. Lane remembered that after hours of marching and attempting to remain outside of the range of cannon in the Black Fort, they “got in the rear of the bishop’s palace and camped that night.” The combined force halted at a site called Walnut Springs and uneasily awaited the trial to come.

Worth’s division resumed its march at sunrise the next morning. After almost two miles of marching south through undulating terrain, Texan recruit Samuel Reid wrote that they “received a rattling fire of scopets from about five hundred of the enemy’s cavalry, who had suddenly come upon us, and had taken position on the point of a hill nearby.” As described by Lane, “The Mexicans formed in gallant style and attacked us, under command of one of the most distinguished cavalry officers.” Despite the defenders’ bravery, American firepower proved too much. The volunteers “gave them a withering fire, emptying many a saddle, when our infantry and artillery opened on them, and in five minutes there were no Mexicans to be seen.” Reid recalled that “unerring rifles poured on them a most destructive fire.”

This skirmish opened way for direct attack on Federacion Hill, situated at the extreme southwest of the city. Despite the reality that the Texans were amateurs and Worth possessed two professional infantry regiments, he ordered the rangers to dismount and lead the assault against the heights. Accepting their new role, the volunteers set their horses aside and deployed to the front with the 5th U.S. Infantry in support. Reid recalled the subsequent charge across the Santa Catarina River in the face of the Mexican batteries: “On we pressed, towards their murderous artillery, until we gained the bank of the rapid stream... a terrific storm of shot and grape was now poured into our ranks.”

Mexican soldiers reinforced the battlements while Americans rushed upwards, making the battle a contest to
gain critical mass first. Worth, sensing victory, dispatched the 7th U.S. Infantry as reinforcements. Dana recalled the combined charge by volunteers and regulars: “Up the hill we went with a rush, the Texans ahead like devils.” Reid concurrently described how “the Texians, who commenced ascending the steep and rocky cliffs” were “pouring into the enemy the fire of their deadly rifles… as we drove back the retreating foe.” He wrote that “inch by inch they disputed our ascent, until at last they gave way under our terrible fire… we carried the height with shouts of victory.” Despite the success, the assault carried only the first layer of defenses: “The main work was yet to be done… another bloody fight and more difficult and hazardous awaited them on the early morrow.”

The Americans cleared Federacion Hill and then oriented the captured cannon against the Bishop’s Palace to the north. Simultaneously, the 1st, 3rd, and 4th U.S. Infantry Regiments under Twiggs — along with volunteer infantry regiments from Mississippi, Tennessee, and Ohio in a separate division — attacked northeastern parts of the city on 21 September. This audacious offensive required advancement directly into deadly cannonade from the Black Fort. Though the costly assault failed to gain significant foothold in the city, it diverted Ampudia’s attention from Worth’s effort in the west. One Soldier remembered that the 2nd Texas Rifles conducted security patrols to prevent attacks by “Rancheros and Lancers” against Twiggs’s rear during the first day of attacks.

Worth commenced his attack against the vaunted Bishop’s Palace on 22 September with a predawn assault. All involved understood possession of this fortress would position the invaders to move against the city proper. Like before, volunteers and regulars assaulted as a combined force. Texan revolvers and infantry bayonets then shattered a Mexican line that defended forward of the castle, while mobile artillery pounded the fort at close range. One officer described the culminating moment that followed: “After a few discharges we made a breach in the walls, charged through, and took the palace in gallant style. The enemy retreated down to the city.”

The contest for Monterrey climaxed on 23 September with American forces assaulting its interior from the west and northeast. The hard fighting that followed was characterized by alley-to-alley and house-to-house fighting. At this time in U.S. history, veterans of the Texas Republic’s wars possessed more experience in urban combat than any other American demographic. While the U.S. Army had been predominantly preoccupied since the War of 1812 with woodland Indians in forested places like Florida, Alabama, and the Old Northwest, Texans had fought the Mexican army for control of border towns like San Antonio and Laredo for decades.

The Texan volunteers attacked in the vanguard of the final American assault, marking the third offensive in which they joined the lead infantry companies on foot. During the night both divisions managed to gain footholds on the city periphery by occupying abandoned houses as Mexican soldiers and civilians retreated inwards. In the morning, at first light, both wings began a vicious advance through inner streets. Competition between Worth and Twiggs to occupy the plaza first — and therefore reap glory in the American press — further galvanized the attack.

The climactic assault was truly terrible. American Soldier T. B. Thorp observed the volunteers during the battle, attesting that “it was a terrible sight, even compared to the two days of sanguinary battle of Monterrey, to witness the Texians; adopting their own mode of fighting, they soon broke into the shut up houses, scaled walls, and appeared on the housetops.” He then described how they wielded “heavy axes” to break through house walls and doors to avoid “enfilading fire” and “barricades of solid masonry.” With such tactics, the combined forces inexorably fought to reach the center of the city.

A similarly bloody advance occurred in the city’s western precincts where Worth’s infantry regulars and volunteers fought together through the urban density. Lane narrated the assault: “Our force, under Gen. Worth, charged down the main street, on our side, but the fire being so heavy behind the barricades they had thrown up across the street, and form the house-tops.” The veteran Texas Ranger then continued: “We had to take the houses on each side and go through them. Col. Hays went down the right hand, and Col. Walker on the left of the streets, fighting form house to house, and dislodging the Mexicans as we went.”

The gradual envelopment by the three combined arms divisions proved irresistible as the stubborn Mexican defenders gave way to the onslaught. One American officer stated, “By nightfall, we had got within fifty yards of the main plaza, which was filled with their troops.” After spending an uneasy night in captured positions, the integrated divisions commenced their attacks again in the morning “from the
housetops, on both sides of the street, firing on them." The Mexican command finally capitulated when Twiggs’s men began firing mortars into the congested plaza, making organized defense untenable.

**Total Force Lessons**

The tactical victory achieved by volunteers and regulars in the Battle of Monterrey had far reaching strategic impact. With annexation of Texas now secure, the theater was set for additional invasions of Mexican California and, eventually, along the Atlantic Coast. By appreciating the relative strengths that each of his citizen-Soldiers and professional contingents possessed and then organizing them into combined arms teams, Taylor had created an expeditionary army that could win decisively against an entrenched enemy in unfamiliar territory. Reflecting on the unlikely cooperation, Lieutenant Dana, with the infantry regulars, praised how their own “Texan riflemen told well upon the enemy.”

The lesson from the American victory at Monterrey remains as relevant today as it was then: The U.S. Army is only as strong as the degree of cooperation between its Active, Guard, and Reserve components. Each contingent provides a critical — and usually optimized — capacity to the larger landpower institution to allow a Total Force approach to executing Unified Land Operations. As demonstrated in the hard-fought battles of the Mexican War, and more recently during counterinsurgency operations in Iraq and Afghanistan, unity of effort between guardsmen, reservists, and regulars remains and enduring pillar of the American Way of War.

This tenet will remain true so long as the United States seeks to maintain influence abroad through dynamic force projection. As argued in Army Doctrine Publication (ADP) 1, *The Army*, the institution’s ability to mobilize each of its components as an integrated team will remain foundational to its ability to provide the “depth and versatility” required to project “tailored landpower.” It means that sum of its Total Force capacity — represented by Americans from all walks of life — will always prove greater than its individual parts. When the active component deploys to fight in distant theaters as they once did in the Mexican War, their citizen-Soldier counterparts will never be far behind.

**Notes**

5. Ibid.; Samuel Reid, *The Scouting Expeditions of McCulloch’s Texas Rangers; or the Summer and Fall Campaigns of the Army of the United States in Mexico* (Philadelphia: John E. Potter and Company, 1885), 154.

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*A drawing shows Monterrey as seen from Independence Hill in the rear of the Bishop’s Palace as it appeared on 23 September 1846.*

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On the evening of 6 December 1944, PFC Mort Ammerman of the U.S. 11th Airborne Division’s 188th Glider Infantry Regiment (GIR) found himself and three other troopers guarding a bridge in the Burauen area of Leyte Island in the Philippines. Unbeknownst to Ammerman and his comrades, the Japanese forces in the Philippines were about to execute a parachute assault against several American-held airfields on Leyte in an attempt to delay or halt Allied air attacks on Japanese installations and troop formations. In a relatively rare case in military history, the Japanese paratroopers would find themselves fighting their opposite numbers on the Allied side, American parachute and glider troops like Ammerman. The American paratroopers would overcome their initial shock to display the adaptability and initiative of American airborne troops that characterized many of their wartime exploits.

On 20 October 1944, Allied forces landed on Leyte Island in the Philippines, fulfilling GEN Douglas MacArthur’s promise to return to the islands after their conquest by the Japanese almost three years earlier. The island would serve as a stepping stone to Luzon, the northernmost of the Philippines’ major islands and home to the capital, Manila, as well as some 180,000 Japanese troops in the Fourteenth Area Army under General Tomoyuki Yamashita. Leyte, stretching some 110 miles from north to south and ranging from 15 and 50 miles in width, presented good terrain for an amphibious assault on its eastern shore, and it was there that the Americans landed. Initially, American forces landing on the island consisted of LTG Walter Krueger’s U.S. Sixth Army, including two corps (X and XXIV) with two divisions each, plus another two in reserve. Meanwhile, on the eve of the Allied invasion, Japanese forces on the island centered around the 16th Division under Lieutenant General Shiro Makino and totaled some 20,000 troops. Over the course of the campaign, Allied ground forces would advance westward across Leyte, supported by Vice Admiral Thomas C. Kinkaid’s U.S. Seventh Fleet and Allied Air Forces under Lieutenant General George C. Kenney. Eventually, both the Americans and Japanese would see the need to employ airborne forces in the fight for Leyte, although in very different ways.

In one of the more obscure facts of World War II, both the Imperial Japanese Army (IJA) and Navy (IJN) had elite parachute troops. Initially raised in 1940 after the Japanese saw the success of German paratroopers in Western Europe, these paratroopers participated in three successful parachute jumps to seize airfields during the Japanese conquest of the Dutch East Indies (modern Indonesia) in 1942 — two by the IJN and one by the IJA. By 1944, the Japanese airborne forces had swelled to more than 13,000 troops, organized into the IJA’s 1st Raiding Group (a division-sized equivalent with 12,000 men) and the two 750-man IJN Yokosuka Special Naval Landing forces. Unique among World War II airborne forces for possessing their own organic transports, in practice Japanese paratroopers were rarely deployed with their organic aircraft and had to rely on outside units to fly them into battle. Considered elite formations by the Japanese high command, these units had many automatic weapons but nevertheless lacked artillery and needed extensive external logistical support.

The American paratroopers opposing the Japanese on Leyte were also elite. Activated at Camp Mackall, NC, on 25 February 1943, the 11th Airborne Division was the first American airborne division to be created entirely with recruits and trained as a division. Commanded by MG Joseph M. Swing, who had observed the 82nd Airborne Division’s parachute assaults on Sicily as an artillery commander, the division departed for overseas duty from San Francisco on 8 May 1944 and conducted jungle training and acclimatization in New Guinea. With approximately 8,000 men in the 511th Parachute Infantry Regiment (PIR — an all-volunteer unit
with a 65-percent attrition rate in training), 187th and 188th GIRs, two parachute field artillery battalions, and a number of service and support companies, the 11th Airborne Division first entered combat on Leyte on 18 November 1944 and began its “brief but impressive combat record.” Operating as a regular infantry unit to free the 7th Infantry Division for an offensive drive elsewhere, the division landed approximately 40 miles south of Tacloban, Leyte’s capital, to continue the westward advance into the mountains west of Burauen and seize all mountain passes into the Leyte Valley.

Chief among the 11th Airborne Division’s missions in the westward advance was to clear a crucial Japanese supply route along the Ormoc-Burauen Trail, a task which it completed largely “through the surprise and effectiveness of its night attacks.” Despite the division’s success, on the evening of 6 December 1944 as the 11th Airborne Division bivouacked for the evening, the Japanese launched their 250-man parachute assault at the San Pablo airstrip, part of what the Japanese called Operation Wa. Due to the threat American aircraft operating from Leyte airfields posed to their lines of communication between the Home Islands and Japanese-held territories in the South Pacific, the Japanese intended the Wa operation to regain control of these airfields and prevent American air force units from being able to mass there.

Besides the Japanese elements attacking the San Pablo strip, other elements of the IJA’s Second Parachute Group, including the 3rd and 4th Parachute Regiments supported by fighters and bombers to suppress the airfields’ defenses, assaulted the Buri Airstrip to the northwest of the San Pablo Strip and the Bayug Airstrip to the west. In attempting to regain control of the eastern airfields on Leyte and reduce the Americans’ air superiority, Operation Wa also envisioned the Japanese 16th and 26th Infantry Divisions, then in the hills west of Burauen, launching a ground assault which coincided with the attack of the Second Parachute Group’s paratroopers.

While the parachute assault had to be postponed from the night of 5 December to the night of 6 December due to bad weather, the 16th Division never received word of the postponement as a result of poor communications and still attacked on 5 December, initially seizing part of the Buri Airstrip and then joining with the paratroopers jumping that evening to secure the rest of the field. Meanwhile, due to poor reconnaissance, the 26th Division had difficulty moving along its narrow axis of advance, which was nothing more than a small local trail. Although it postponed its attack until 6 December, the 16th Division and its paratroopers had already taken heavy losses and the 26th had made few appreciable gains.

documents and prisoner interrogations at the end of November indicated Japanese plans for a coordinated ground-airborne attack to seize the airfields around Burauen. While the XXIV Corps intelligence officers deemed the Japanese incapable of conducting such a plan, the corps commander, MG John R. Hodge, alerted his subordinate units to the possibility of a Japanese parachute assault and ordered precautionary measures put in place such as having all Soldiers keep their weapons and helmets within arms’ reach.\textsuperscript{16} The Americans also set blocking positions on all of the trails leading east from the mountains to the airfields, although unbeknownst to them elements of the Japanese 16th Division were still able to infiltrate from the mountains to the Buri airstrip.

While the leadership of the 11th Airborne Division had received warning of a possible Japanese airborne assault from the XXIV Corps on 4 December and had received a company from the 77th Infantry Division to reinforce the airfield at Dulag, some were skeptical and the information did not get down to the lowest Soldiers. Therefore, many Americans were shocked by the Japanese attack when it occurred on 6 December.\textsuperscript{17} The headquarters of the U.S. Fifth Air Force was in the area of the Japanese attack, and LTG Krueger had cobbled together his engineers and support troops, including the division’s Military Police platoon, into a more coherent composite force with the mission of retaking the San Pablo strip along with other troops that MG Swing had ordered to the airfield.\textsuperscript{21}

Over the course of the previous evening, MG Swing had determined the Japanese parachute assault was an attack in strength and, with the 511th PIR and much of the 188th GIR fighting Japanese forces to the west and unable to reinforce the airfields, directed LTC Lukas E. Hoska Jr.’s 674th Glider Field Artillery Battalion to leave its guns on nearby Bito Beach and assist in the effort to retake the fields as infantry.\textsuperscript{22} On the morning of 7 December, Swing personally directed a provisional regiment, consisting of Hoska’s artillery battalion and Davis’s composite battalion, in the westward attack to retake the San Pablo airstrip.\textsuperscript{23} Although the engineer battalion, moving on the left side of the attack, managed to envelop Japanese forces from the west with one of its engineer companies, it had to halt its advance due to a lack of ammunition and water, and LTC Davis ordered the engineers to secure the gains on the west side of the field and the artillerymen to secure the gains on the east side.\textsuperscript{24} At 0900 the commander of the 187th GIR, COL Harry Hildebrand, assumed command of the provisional force and directed an attack but then rescinded the order on advice from LTC Davis due to the lack of supplies. The provisional regiment consolidated its gains, with the engineers being relieved in the morning and the artilleryman regaining control of the entire airstrip later on 7 December.
In addition to the counterattack at the San Pablo Airstrip, Swing also directed the 1st Battalion of the 187th GIR to retake the Buri Airstrip along with other reinforcements. Medium tanks from the attached 767th Tank Battalion also assisted in the efforts to retake the airfields, with two tank platoons supporting service units that had taken a “considerable number of casualties” and had “no organized resistance or established defense.” Combined with the recently arrived infantry battalions that LTG Krueger detached to the 11th Airborne, the Americans continued to take the initiative and advance against the remaining Japanese paratroopers despite heavy automatic weapons fire from Japanese positions.

With many of the support units of the 11th Airborne Division engaged, the inexperienced 1st Battalion, 149th Infantry Regiment, having been attached to the 11th Airborne Division, was alerted to move to the San Pablo airstrip at 0200 on 7 December and left its mess, supply, and administrative personnel on Bito Beach to link up with MG Swing. Swing gave a brief order to the men of the 149th to attack the Buri airstrip, 1,500 yards away, along a westward axis, and the battalion commander immediately drew up plans to have two infantry companies advance abreast with another company and the 81mm mortar platoon in support. Lacking time for a reconnaissance, the two attacking companies lost contact with one another when they encountered a swamp, and with evening approaching the battalion commander decided to postpone the attack and set up a perimeter defense. Despite the lack of success, the troops of the 149th Infantry made contact with the 11th Airborne Division’s 1st Battalion, 187th GIR around 1630 and prepared to attack the next morning.

Meanwhile, the 1st Battalion, 382nd Infantry, 96th Division, also under the operational control of the 11th Airborne Division, took positions near the 1st Battalion, 149th Infantry. The 149th Infantry’s new attack plan had its two attacking companies advancing at 0800 on 8 December. Beginning as scheduled, this attack managed to cross the airfield despite taking some friendly artillery fire but encountered heavy Japanese resistance on the far side of the airstrip and was repulsed. Although Swing was displeased by the lack of progress, he approved the recommendation of the 149th’s regimental commander that the 2nd Battalion be brought to secure the area and conduct patrolling to allow the 1st Battalion to concentrate on another attack. The rest of 8 December saw the American battalions consolidating their positions on the edge of Buri Airstrip, with the 382nd Infantry having come under heavy Japanese machine-gun fire during the morning until mortar support and the heroic actions of PVT Ova A. Kelley silenced the Japanese guns.

Unable to attack again on 9 December due to a lack of ammunition and under orders from the regimental commander, the 1st Battalion changed its scheme of maneuver for an offensive on 10 December, with two companies conducting an envelopment to the west with a third in support. Despite the fact that two of the advancing companies mistakenly got into a firefight with each other, fortunately producing minimal casualties, the new maneuver allowed the advancing infantry to systematically reduce the Japanese strongpoints until nightfall halted operations. The following day saw the 1st Battalion complete its clearance of the airstrip, with the battalion claiming 300 Japanese dead and forcing the withdrawal of 200 more at the cost of 40 killed and 100 wounded. Although it took some adjustment, even the 149th Infantry demonstrated adaptability in counterattacking the Japanese.

Besides ground combat units, American anti-aircraft units like the 152nd Airborne AA Battalion were crucial to the defense of the airfields around San Pablo and Burauen. These units destroyed upwards of a dozen aircraft, including all six of the Japanese aircraft transporting paratroopers to attack airfields beyond the Burauen area. Further demonstrating flexibility, the Americans also used anti-aircraft units in a direct fire role engaging Japanese ground forces, and ground patrols of the 152nd Airborne AA Battalion killed some 40 Japanese troops of the 16th Division on the morning of 6 December prior to the parachute drops. All told, American antiaircraft units accounted for an estimated 400 enemy paratroopers and aircrew killed. The losses sustained by

M. Hamlin Cannon, United States Army in World War II: The War in The Pacific - Leyte: The Return to the Philippines

Operational losses at the Burauen Airfields forced their abandonment and the construction of the field at Tanauan.
the Japanese demonstrate the risks of a parachute assault even when the attackers have local air superiority.

Beyond the actions of senior leaders like the division, regimental, and battalion commanders, there were numerous examples of more junior paratroopers and other Soldiers taking the initiative to defeat the Japanese and retake the airfields. Airborne engineers of the 127th Engineer Battalion received eight Silver Star medals in aggressively counterattacking the Japanese, boldly charging across the Buri airfield to destroy the Japanese paratroopers dug-in on elevated terrain.37 Two lieutenants who were awarded Silver Stars were both cited for taking the initiative in leading counterattacks across the airstrips in the face of heavy fire. Other Soldiers were cited for manning crew-served weapons that enabled their platoons and companies to advance on the Japanese positions, demonstrating initiative by taking the place of machine gunners who had been killed or wounded. The aforementioned actions of the 149th Infantry Regiment’s PVT Kelley also demonstrated that actions to take the initiative were not restricted to the 11th Airborne Division.

Ultimately, the Japanese paratroopers on the San Pablo and southern Burauen airfields were isolated and annihilated, while the Japanese on the northern Burauen field withdrew to the hills on the west on 11 December.38 The retreating Japanese 16th and 26th Divisions found their withdrawal was difficult because elements from the 11th Airborne Division were blocking their line of march, and the headquarters staff of the 35th Army overseeing Operation Wa disbanded and scattered.39 After its successful operations on Leyte, the 11th Airborne Division was pulled off the front line in early January 1945 and allowed to rest on the beach at Abuyog. The rest was short lived, however, as the division embarked on U.S. Navy transports on 26 January to support the invasion of Luzon. While the 187th and 188th GIRs conducted an amphibious landing at Nasugbu, 60 miles south of Manila by road, the 511th PIR conducted its first combat jump, landing along Tagaytay Ridge on 3 February.40 Remaining Japanese forces on Leyte would continue to fight into May of the following year, although the focus of Allied operations in the Philippines shifted to the liberation of the main Philippine island of Luzon on 9 January 1945. The Japanese planned several more airborne operations targeting Allied airfields on Okinawa and Iwo Jima but did not launch any more before the end of the war.

In a period where the U.S. has again begun focusing on large-scale combat operations, this case study provides some insight on how American forces can repel an enemy airborne assault, while illuminating the problems that executing an airborne assault can pose for attacking forces. The operation demonstrated the importance of air defense units and the strengths of an organizational culture that values low-level initiative in repelling an airborne assault. If an enemy force possesses an airborne capability, rear-area troops, like those in the 11th Airborne Division’s Headquarters, can quickly find themselves acting in the role of infantry, firing and maneuvering on enemy paratroopers with the help of armor or artillery. Therefore, if an enemy possesses such a capability, all American Soldiers must be prepared to deal with paratroopers in their midst. From the perspective of the attackers, airborne forces, often possessing only light weapons and limited supplies, must be relieved by other ground forces soon after their landings. The Japanese attack on Burauen is a cautionary tale for any force attempting to conduct a parachute assault in conjunction with a ground attack in the face of strong air defenses. In the final analysis, despite Japanese failures, one must credit the ability of the American Soldier to adapt and win under adverse conditions with carrying the day on Leyte in December 1945.

Notes
3 Ibid, 9.
6 Press Relations, 11th Airborne Division, “History of the 11th Airborne Division,” May 1945, Record Group 407, Box 6545, Entry 427, National Archives and Records Administration, College Park, MD [hereafter referred to as NARA II], 1. In comparison, the 82nd and 101st Airborne Divisions had been formed from fully trained units.
7 The Information Section, Analysis Branch, Headquarters Army Ground Forces, “Fact Sheet of the 11th Airborne Division,” dated 1 March 1947, RG 407, Entry 427, Box 6545, NARA II, 1.
8 “History of the 11th Airborne Division,” 1; “Fact Sheet of the 11th Airborne Division,” 2.
9 Initially, the 11th Airborne Division was only slated to stage on Leyte and not participate in combat operations, but the need to employ the 7th Infantry Division to clear the eastern shore of Ormoc Bay caused the XXIV Corps commander to relieve the 7th Division with the 11th Airborne Division to continue the drive to the west. M. Hamlin Cannon, United States Army in World War II: The War in the Pacific - Leyte: The Return to the Philippines (1953; repr., Washington, D.C.: U.S. Army Center of Military History, 1993), 296.
10 “Fact Sheet of the 11th Airborne Division,” 2.
12 Cannon, Leyte: The Return to the Philippines, 294. Unbeknownst to the Japanese, LG Krueger had all work on these airfields cease on 25 November.
17 Flanagan Jr., The Angels, 146.
19 Rottman and Takizawa, Japanese Paratroop Forces, 47.
21 HQ, 127th Airborne Engineer Battalion, “Subject: K-2 Operation (20


23 Flanagan Jr., The Angels, 155.


28 Cannon, Leyte: The Return to the Philippines, 303-304.


31 Armed with an M1 carbine, Kelley would be awarded a posthumous Medal of Honor for charging the Japanese and killing eight enemy soldiers before he himself was killed. Davidson, et al., The Deadeyes, 69.


33 The Japanese had infiltrated troops along the lines of communication between the San Pablo and Buri Airstrips, hindering resupply to the 1st Battalion, 149th Infantry; Grigg, “The Operations of the 1st Battalion, 149th Infantry,” 12.


35 Rottman and Takizawa, Japanese Paratroop Forces, 47; Records claimed 47 Japanese planes while claiming another 11 probably destroyed and 15 damaged, but as the total attacking force was only 40 planes these numbers are obviously exaggerated. General Headquarters, United States Army Forces, Pacific, “Antiaircraft Artillery Activities in the Pacific War - Section XII: Southern Philippines Campaign,” dated October 1946, 78 retrieved from http://cgsc.cdmhost.com/cdm/ref/collection/p4013coll8/id/1997, accessed 13 February 2019. The even more optimistic Sixth Army report claimed 49 aircraft destroyed across Leyte.


37 “History of the 127th Airborne Engineer Battalion - Section VI: Awards,” dated 28 January 1946, RG 407, Entry 427, Box 6555, NARA II.

38 Reports of General MacArthur, 427. Due to the landing of the American 77th Infantry Division near the important Ormoc Valley, the commander of the Japanese 35th Army ordered the attacks around Burauen to cease and had his forces withdraw in order to hold the Ormoc area. Cannon, Leyte: The Return to the Philippines, 305.


40 Although the lead 18 transports dropped their paratroops on target, the rest of the regiment was scattered by poorly timed drops. Robert Ross Smith, The U.S. Army in World War II: Triumph in the Philippines, The War in the Pacific (1963; repr., Honolulu: University Press of the Pacific, 2005), 227-228; Flanagan Jr., The Angels, 247. Isolating Japanese forces in Manila from the south while the U.S. Sixth Army’s 37th Infantry and 1st Cavalry Divisions advanced on the city from the north, the 11th Airborne Division encountered strong Japanese resistance around the suburb of Bacoor, including minefields, concrete, and even buried aerial bombs rigged with pressure fuses. “History of the 11th Airborne Division,” 17-19.

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Best-selling author Ron Chernow is an extremely influential biographer, for good reasons. Previous substantial studies of the lives and careers of George Washington, Alexander Hamilton, and John D. Rockefeller, as well as histories of banking, have earned widespread praise. His signature strengths include an engaging, at times gripping prose style, accompanied by extensive detailed research.

Chernow's biography of Ulysses S. Grant maintains a high standard. The author brings to life the personality and career of the general who commanded all Union armies during the last year of our Civil War and the less gifted civilian leader who twice won the White House. One question regarding Grant, as with George Washington, is whether one more biography really makes sense, given the large number of books and articles written about him. Regarding Chernow's work, the answer is clearly yes, reflecting the author's reconfirmation of this leader's military skill, personal integrity, and varied accomplishments.

Grant provides a particularly dramatic case of a life that combined exceptional difficulty and frustration with extraordinary ability and accomplishments. After graduating from West Point with a commission in the Infantry and serving with distinction in the Mexican War, he abruptly resigned from the Army. Long separation from his beloved family while on assignment in California and Oregon led to excessive drinking plus financial problems. Chernow assembles persuasive evidence that a vindictive, martinet commanding officer targeted Grant. Failures in business followed. Later, tenure as President of the United States was marked with scandals created by other members of his administration. In between, Grant proved an exceptionally able and successful Army commander during the Civil War, with a series of impressive military victories in the Western theater of operations. Overall command of United States armies in the field followed.

Much popular culture has painted Confederate General Robert E. Lee as superior to Grant in field command. This perspective rationalizes Union victory as the consequence of enormous advantages in men and materiel. The “Lost Cause” school of pro-Southern historians emerged soon after the war and grew influential in the 20th century. Chernow effectively destroys this analysis. Grant possessed a remarkable eye for map and terrain analysis, a genius for military organization, and unrelenting determination. Chernow marshals extensive evidence of Grant’s extraordinary capacities to organize logistics and inspire men to disciplined unity. At the outset of the Civil War, he did this remarkably quickly, starting with an untrained volunteer Illinois company.

The long successful siege of Vicksburg, the last Confederate stronghold on the Mississippi River, represents a masterpiece of campaign planning and execution that has been widely studied since. Grant orchestrated a series of aggressive, fast-moving expeditions that systematically isolated Vicksburg, while suffering fewer casualties than did the enemy. He was persistent, imaginative, and daring in eventually running ships past extensive Confederate artillery batteries. Grant’s critics called him a “butcher,” indifferent to casualties, but that was not reality. His operations achieved the surrender of three still functional armies in the field, at Fort Donelson, Vicksburg, and Appomattox. Chernow provides extensive examples of Grant’s actions and outlook that portray a decidedly sensitive man, moved by the suffering of wounded on both sides, who often intervened directly to help. This complemented his modesty, in manner as well as dress, in contrast to the often-flamboyant senior officers of that era. Ultimately, the democratic style of this uncommon man won affection as well as respect from the troops.

Grant was a strategist, whereas Lee was most skillful in handling the single battlefield. The final year of the war saw Grant, with President Abraham Lincoln’s full support, orchestrating a comprehensive sustained national offensive, coordinated between the Eastern and Western theaters, which brought victory. America’s relatively democratic culture permitted Grant to step into command early in the war and move up. In this context, the vast expansion of forces required to meet the unprecedented demands of the Civil War opened tremendous opportunities for a man of Grant’s remarkable talents, who had suffered earlier reversals.

Grant faced frustration in the White House but with some successes. He was an excellent judge of military talent but proved naive in politics and victimized relatively easily. A strong sense of loyalty, a vital asset in the comradeship of combat, led him to continue supporting corrupt political appointees. Yet he also protected the rights of newly freed African Americans and effectively fought the Ku Klux Klan. Party political pressures led him to relent late in his administration, something he said afterward was...
a terrible mistake. The author develops this dimension, complementing his discussion of the Civil War years and adding to our understanding of Grant.

Ron Chernow contributes important fresh perspectives on Ulysses Grant, a complicated as well as extremely talented leader, in a book geared to a general audience. His work is a worthy complement to Grant’s own important memoirs.

(John I. Cyr is director of the Clausen Center for World Business at Carthage College in Kenosha, WI.)

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**War in 140 Characters: How Social Media is Reshaping Conflict in the Twenty-First Century**

By David Patrikarakos


Reviewed by CPT Kevin M. Bernhardt

Leaders make decisions within an instantaneous global media cycle, influenced by anyone who maintains a social media account with the ability to engage an audience’s emotions and biases. In almost every moment in modern warfare, individuals consistently update events that occur around them on social media, in which the immediacy of reporting can lead to information supremacy. David Patrikarakos, the author and a British investigative journalist who reports on war and international affairs, shows how social media has changed the landscape of warfare in the 21st century by shifting the power of institutional media outlets to the individual, who he labels “homo-digitalis” or the hyper-empowered individual. Patrikarakos argues that anyone with access to the internet can serve as an actor in war.

Patrikarakos developed his thesis through a collection of primary source interviews from people who shaped the conflict around them by way of social media. The author also taps into his own personal experiences reporting on war, adding to the credibility of his thesis. He describes the effects of photographs posted on social media sites by Farah Baker, a Palestinian teenager, which included graphic images of casualties following air raids in the Israel and Palestinian conflict, immediately influencing the global narrative. The author emphasized that Farah, “the Citizen Journalist,” did not have any formal media training; however, she did have a phone and an internet connection, which allowed her to immediately post graphic images that contradicted institutional media reports that claimed the bombing had ended.

Patrikarakos also asserts the importance of data emitted by social media through the story of Eliot Higgins, “the Interpreter” of imagery and data. Higgins, a former world-class video gamer, analyzed publicly available geo-located images and articles to investigate Malaysia Airlines Flight 17, an airline that unaccountably crashed in the Ukraine in 2014. Higgins’ ability to analyze the information from these open source sites ultimately revealed evidence proving the Russian military shot down the airliner, contrary to official Russian denials. Higgins’ example displays the power of analytics, and the vulnerability and exploitation value of data produced by open source media.

Patrikarakos also tells the story of Sophie Kasiki, a French woman victimized by the Islamic State’s recruiting campaign through social media. Several of Kasiki’s male friends who accepted the call to the Caliphate radicalized Sophie through iterative interactions on the internet and convinced her to travel to Raqqa, Syria. Once she arrived in Raqqa, the narrative that her friends described did not come close to the disheartening reality of the Caliphate. After a month, she escaped and returned to tell her story. Sophie’s story shows the potential impact of social media in a real-life story and outlines how the Islamic State used social media as an effective but deceptive recruiting tool.

The author transitions well from story to story and allows the reader to understand the impact of social media in war. For balance, he interviewed competing actors, to include Israeli Defense Force officers about their effort to counter narratives by Farah Baker and other Palestinian media reports. However, he shows a subtle prejudice and emotional tone in the quantity and quality of content he presents for Farah Baker, which culminates in overt bias in his conclusion. His closing paragraphs compare effects of current populist movements powered by social media with pre-World War I conditions in 1914, and he suggests that the 2016 U.S. election and the Brexit serve as indicators of future large-scale conflict. Although his lack of objectivity in his out of place conclusion affects his argument, this small misjudgment does not take away from the greater lessons in the rest of his book.

Operational leaders and staffs should understand the impact of social media and the speed in which the effects, whether positive or negative, of operations can proliferate throughout the operational environment. War in 140 Characters: How Social Media is Re-shaping Conflict in the Twenty-First Century provides awareness for the potential effects of social media in war for leaders in an operational environment. Patrikarakos’ insights will be valuable to commanders, operations officers, and targeting officers, who are either currently deployed or preparing to deploy to any operational theater.

(At the time this review was submitted, CPT Kevin Bernhardt was a student in the Defense Analysis Program at the Naval Postgraduate School, Monterey, CA.)